



Silicon Flatirons

A Center for Law, Technology, and Entrepreneurship at the University of Colorado



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LETTER FROM THE EXECUTIVE DIRECTOR

As we turn the calendar to 2013, and Silicon Flatirons officially enters its teenage years (the Center was founded in January 2000, for those who are keeping track), we continue to work toward advancing our basic mission. In short, that mission involves connecting different communities that need one another, but don't always engage. Notably, Silicon Flatirons convenes engaged gatherings and builds community, bringing together national and international policymakers, industry leaders and academics, as well as startups and faculty, staff, and students here at the University of Colorado. To that end, we focus on three principal goals:

- Elevate the debate surrounding technology policy issues;
- Support and enable entrepreneurship in the technology community;
- Inspire, prepare, and place students in the technology and entrepreneurial sectors.

The range of activities sponsored by Silicon Flatirons in 2012 covered the gambit of cutting edge issues in technology and entrepreneurship. Over the course of the year, Silicon Flatirons deepened understanding on a broad range of topics, including work on angel investing (see the report, bringing angel investing out of the shadows), to an apps privacy summit (the video is here), to the Next Ten Years of Spectrum Policy, to the changing nature of the legal profession (see the Law 2.0 report on a new continuum of legal education). In 2013, we begin the year with another blockbuster conference, the Technology of Privacy, followed by our Digital Broadband Migration conference on February 10-11 and then our Annual Entrepreneurship Conference on March 21. In all cases, Silicon Flatirons proudly operates as a source for new ideas, a forum for in-depth discussions and research, as well as a valuable campus platform for the technology community.

On the personnel front, we have a number of developments to report. First off, we are thrilled to welcome <u>Blake Reid</u>, currently at the Georgetown University Institute for Public Representation, back to Colorado Law. Starting this summer, Blake will take over the <u>Samuelson Glushko Technology Law and Policy Clinic</u> and will rejoin the Silicon Flatirons community (where he made a big impact as a student here). Second, we are delighted to have Doug Sicker, now back from Washington, and David Reed, formerly of CableLabs and the FCC and now at our Interdisciplinary Telecommunications Program, join us as Senior Fellows. Finally, we are sorry to see both Preston Padden and Joe Waz move on from their Senior Fellow roles, where they each made important and lasting contributions to Silicon Flatirons.

With respect to thought leadership on technology law and policy, Silicon Flatirons had a very active 2012. In addition to a series of conferences exploring topics from the future of video to the future of wireless spectrum, we also published seven different reports, from cybersecurity to private equity and venture capital to public safety communications. Moreover, our Samuelson-Gluskho Technology Law and Policy Clinic that Blake will lead affords law students and interdisciplinary telecommunications students the chance to engage in technology policy advocacy directly, leading to a new exemption to the DMCA for security research and the development of privacy rules for the smart grid, to take two examples.

On the entrepreneurship front, Silicon Flatirons helps architect a startup scene where innovation occurs. Last year, the Entrepreneurship Initiative offered 48 events with over 6,600 attendees. For those looking to get involved, please check out BoulderStartups.org. And for a great exploration of what it takes to build entrepreneurial communities, you can read Brad Feld's book on Startup Communities, which emphasizes the experience of Boulder, and you can watch a recent discussion with Brad and others on that topic. And as you think of college students interested in entrepreneurship, please let us know, as we are now supporting a Startup Summer offering that brings a college student to work at a Boulder (or Denver) startup and engages them in our entrepreneurial community.

Finally, we are continually impressed and motivated by our students, who are ever-more entrepreneurial and interested in making a difference in the technology world. This summer, we will be sending what looks to be a record number of them to Washington, D.C. for internship opportunities (with thanks to Preston Padden's leadership) and we continue to develop great opportunities at an array of employers interested in taking advantage of and helping them develop their talents. If you are open to taking on an intern, please let me know. Similarly, if you are interested in supporting Silicon Flatirons or different key initiatives, there is more information here about how you can do so.

For those looking to join our community and get to know us, it's easy. Just show up and let any of us—myself (phil.weiser@colorado.edu), Brad Bernthal (brad.bernthal@colorado.edu), Paul Ohm (when he is back from the FTC), and Anna Noschese (anna.noschese@colorado.edu)—know that you want to get involved. And if you know lawyers—or would be lawyers—interested in entrepreneurial law or technology law, there's not a better place to be than Colorado Law. To that end, Colorado Law's LLM in Entrepreneurial Law is worth checking out; please spread the word. Similarly, our LLM in Technology and Intellectual Property Law offers unique opportunities to students interested in moving quickly up that formidable learning curve.

As always, please feel free to let me know your ideas and suggestions for how Silicon Flatirons can better serve our mission of elevating the tech policy debate, spurring entrepreneurship, and supporting students by emailing me at phil.weiser@colorado.edu, by reaching out to our Program Director extraordinaire Anna Noschese (anna.noschese@colorado.edu), or, in the case of Intellectual Property/Information Technologies and Entrepreneurship, respectively, reaching out to Paul Ohm (paul.ohm@colorado.edu) or Brad Bernthal (bernthal@colorado.edu).

Cheers,

Phil

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ABOUT SILICON FLATIRONS

he Silicon Flatirons Center for Law, Technology, and Entrepreneurship is an interdisciplinary research center at the University of Colorado Law School. Silicon Flatirons' core mission is to elevate the debate surrounding technology policy issues; support and enable entrepreneurship in the technology community; and to inspire, prepare, and place students in these important areas. In fulfilling this mission, Silicon Flatirons serves as a source for new ideas, a forum for in-depth discussions and research, as well as a valuable campus platform for the technology community. Silicon Flatirons pursues three basic goals:

- ELEVATE THE DEBATE SURROUNDING TECHNOLOGY POLICY ISSUES
- Support and Enable Entrepreneurship in the Technology Community
- Inspire, Prepare, and Place Students in Technology and Entrepreneurial Law

PRIMARY INITIATIVES

TECHNOLOGY POLICY

Rapid developments in technology spur economic growth and empower consumers. Innovation policy and institutional design can stimulate or stunt technological change. Seated comfortably in Boulder, Colorado (an innovation hub), the Silicon Flatirons Center is well positioned to attract thoughtful policy leaders, legal and business professionals, and entrepreneurs to discuss the challenges and opportunities of various technology policy issues. The Center's recent initiatives in this area include an Innovation Policy conference, a focus on broadband policy, discussions on health care innovation, and roundtable discussions on cloud computing.

ENTREPRENEURSHIP

Something special is happening in Boulder's entrepreneurial circles, and the world is taking notice that Boulder is a world-class location to start a business. In support of this creative environment, Silicon Flatirons helps stitch together the entrepreneurial fabric for the area's software, telecommunications and Internet startup communities.

PRIVACY AND CYBERSECURITY

Information privacy and cybersecurity have emerged as one of the most vital, contested, and important areas of debate in technology law and policy. Silicon Flatirons devotes a considerable amount of time and energy to this field, sponsoring an annual conference on information privacy that has become one of the most important venues for debate; housing scholars at the center of thought leadership on the topic; and training students to become the next generation of lawyers, advisors, and policymakers in the field.

SPECTRUM POLICY

Wireless networking technology is the fastest growing segment in the United States telecommunications market and holds out the promise of providing greater broadband competition, increased connectivity in rural areas, and increased communication density in developing nations that are not able to invest in wired infrastructure. But making this vision a reality entails overcoming formidable barriers that can only be solved through careful interdisciplinary work that pulls together policy, electrical engineering, and computer science expertise.

PATENT POLICY

Silicon Flatirons hosts a yearly patent conference, with this year's conference focusing on competition policy and patents. That conference coincided with Colorado Law hosting the Court of the Appeals for the Federal Circuit, which held arguments in our courtroom. Early this year, we also hosted David Kappos, the Director of the US Patent and Trademark Office. With the US Patent Office opening up a branch office in Denver, Silicon Flatirons will look for promising areas where we can work together. Our Entrepreneurial Law Clinic also has made available a select number of spots for students interested in patent prosecution to develop real-world experience in this area.

INITIATIVES & PROJECTS

ENERGY INNOVATION

Meeting the world's growing energy needs in a sustainable and secure fashion stands as one of the great challenges of the 21st century. The Energy Innovation Initiative brings together leaders from government, law, finance, industry, and academia to address key aspects of this challenge and develop innovative approaches and solutions across a range of sectors. The Initiative builds on the law school's deep expertise in technology, entrepreneurship, energy and natural resources to support research and analysis on the critical policy, regulatory, and business aspects of the energy innovation challenge; training for students and professionals; and an ongoing series of public lectures, workshops, and conferences

HATFIELD SCHOLARS & RESEARCH PROGRAM

The Dale Hatfield Scholars and Research Program is designed to encourage student interest in public service by providing grants for summer internships in government or public interest positions. With the support of many generous benefactors, the Hatfield Program has become a flagship program at the University of Colorado and has already helped to bring many students to Washington, D.C. to take positions in government and non-profit organizations since it was established in 2006.

Institute for Regulatory Law & Economics

The Institute for Regulatory Law & Economics (IRLE) is sponsored by the Silicon Flatirons Center as a means of supporting thoughtful regulatory decision-making. In particular, the IRLE hosts an annual seminar for state public utility commissioners and staff as well as engages in state outreach activities. In so doing, it works with two related Silicon Flatirons initiatives - the Glushko Samuelson Technology Policy Law Clinic and the Dale Hatfield Scholars and Research Program.

PUBLIC SAFET

The reliability of public safety communications systems in the United States underpins the faith of the citizenry in its leaders and institutions. Unfortunately, public safety communication resources and technologies trail far behind the innovative, cutting-edge, and cost-effective technologies commercial cellular providers offer their customers. The Silicon Flatirons Center has and will continue to consider the needs and limitations of public safety communications with an eye toward breaking down institutional barriers that prevent public safety agencies from adopting the capabilities needed to make them effective and reliable.

STARTUP COLORADO

Startup Colorado is a regional initiative to increase the breadth and depth of the entrepreneurial ecosystem across Colorado's Front Range. From Fort Collins to Boulder, from Denver to Colorado Springs, Startup Colorado's mission is to multiply connections among entrepreneurs and mentors, improve access to entrepreneurial education, and build a more vibrant entrepreneurial community. Startup Colorado's various programs will deepen the communal backdrop out of which new companies emerge. Vibrant new company creation, by extension, improves the broader economic base of Colorado.

SILICON FLATIRONS LEADERSHIP



Phil Weiser Executive Director

Phil Weiser is the Dean of the Law School, Thompson Professor of Law, and Executive Director and Founder of Silicon Flatirons Center for Law, Technology, and Entrepreneurship at the University of Colorado. Dean Weiser re-joined the Colorado faculty in June, 2011. From April 2010-June 2011, he served as the Senior Advisor for Technology and Innovation to the National Economic Council Director at the White House. From July 2009-April 2010, he served as the Deputy Assistant Attorney General at the United States Department of Justice's Antitrust Division. Since first joining the CU faculty in 1999, Dean Weiser has worked to establish a national center of excellence in telecommunications and technology law,

founding the Journal on Telecommunications & High Technology Law and the Silicon Flatirons Center as well as writing and teaching in the areas of competition policy, innovation policy, and Internet policy. Over the last ten years, Weiser has co-authored three books (The Jury and Democracy: How Jury Deliberation Promotes Civic Engagement and Political Participation (Oxford University Press 2010), Telecommunications Law and Policy (Carolina Academic Press 2006), and Digital Crossroads: American Telecommunications Policy in the Internet Age (MIT Press 2005)), written numerous articles (in both law journals and publications such as the Washington Post and Foreign Affairs), and testified before both houses of Congress. He also remained engaged in public service, arguing a number of pro bono cases before the Tenth Circuit Court of Appeals, co-chairing the Colorado Innovation Council, and serving as the lead agency reviewer for the Federal Trade Commission as part of the 2008 Presidential Transition.



Brad BernthalEntrepreneurship Initiative Director

Brad Bernthal is an Associate Professor of Law at the University of Colorado and the Entrepreneurship Initiative Director at Silicon Flatirons Center. Professor Bernthal leads the Entrepreneurial Law Clinic and the Samuelson-Glushko Technology Law & Policy Clinic. In addition to his clinical instruction, Professor Bernthal teaches doctrinal courses in the areas of telecom policy, spectrum management, and entrepreneurial finance. Prior to joining Colorado Law as an Associate Clinical Professor, Professor Bernthal served as a Silicon Flatirons Fellow from 2005-2007, a research associate appointment associated with the Silicon Flatirons Center. His current research involves telecommunications policy issues with a focus on spectrum management, public safety, and so-called 'smart' radios (i.e., cognitive and software defined radios). Professor Bernthal also teaches in the

 $Interdisciplinary\ Telecommunications\ Program\ (``ITP"').$



Paul OhmDirector of the Privacy and Cybersecurity Initiative

Paul Ohm is an Associate Professor of Law at University of Colorado Law School and Privacy Director at Silicon Flatirons Center. Professor Ohm specializes in the emerging field of computer crime law, as well as criminal procedure, intellectual property, and information privacy. Prior to joining CU he worked as an Honors Program trial attorney in the Computer Crime and Intellectual Property Section of the U.S. Department of Justice. Professor Ohm is a former law clerk to Judge Betty Fletcher of the U.S. Ninth Circuit Court of Appeals and Judge Mariana Pfaelzer of the U.S. District Court for the Central District of California. He attended the UCLA Law School where he served as Articles Editor of the UCLA Law Review

and received the Benjamin Aaron and Judge Jerry Pacht prizes. Prior to law school, he worked for several years as a computer programmer and network systems administrator, and before that he earned undergraduate degrees in computer science and electrical engineering.



Pierre de Vries Co-Director of the Spectrum Initiative

Pierre de Vries is a Senior Adjunct Fellow at Silicon Flatirons and researches and advises clients on the intersection of information technology and government policy. His current projects include regulatory paradigms for the Internet/web, alternative conceptual models for wireless policy, spectrum

allocation in the TV white spaces, and the impact of intangibility on decision-making in the digital world. Mr. de Vries is a Research Fellow at the Economic Policy Research Center of the University of Washington, and a Senior Adjunct Fellow of the Silicon Flatirons Center at the University of Colorado, Boulder. He is also a technology advisor to the Washington, D.C., law firm of Harris Wiltshire & Grannis. He is a former Chief of Incubation and Senior Director of Advanced Technology and Policy at Microsoft Corporation. Prior to his twelve years at Microsoft, Mr. de Vries worked for Korda & Co, a London-based seed capital company and consultancy, advising corporate customers like Pearson and Scientific Atlanta on the likely evolution and business impact of new technologies. He evaluated potential venture capital investments, negotiated investments and relationships, and served as a startup board member.



Dale Hatfield Co-Director of the Spectrum Initiative

Dale Hatfield is currently a Senior Fellow at the Silicon Flatirons Center for Law, Technology, and Entrepreneurship and an Adjunct Professor in the Interdisciplinary Telecommunications Program – both at the University of Colorado at Boulder. Prior

to joining the University of Colorado, Hatfield was the Chief of the Office of Engineering and Technology at the Federal Communications Commission (FCC) and, immediately before that, he was Chief Technologist at the Agency. He retired from the FCC and government service in December 2000. Before joining the FCC in December 1997, he was Chief Executive Officer of Hatfield Associates, Inc., a Boulder, Colorado based multidisciplinary telecommunications consulting firm. Before founding the consulting firm in 1982, Hatfield was Acting Assistant Secretary of Commerce for Communications and Information and Acting Administrator of the National Telecommunications and Information Administration (NTIA). Before moving to NTIA, Hatfield was Chief of the Office of Plans and Policy at the FCC. Hatfield has nearly fifty years of experience in telecommunications policy and regulation, spectrum management and related areas. Hatfield holds a BS in electrical engineering from Case Institute of Technology and an MS in Industrial Management from Purdue University.

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ELEVATE THE DEBATE SURROUNDING TECHNOLOGY POLICY ISSUES



CONFERENCES

With respect to thought leadership on technology law and policy, Silicon Flatirons had a very active 2012. In addition to a series of conferences exploring topics from the future of video to the future of wireless spectrum we also published seven different reports, from cybersecurity to public safety communications and effective interference management. Moreover, our Samuelson-Gluskho Technology Law and Policy Clinic affords law students the chance to engage in technology policy advocacy directly, leading to a new exemption to the DMCA for security research and the development of privacy rules for the smart grid, to take two examples. Other recent activity in this area includes conferences on innovation, competition policy and patents, and roundtables on health care innovation and cloud computing.

The Digital Broadband Migration: The Challenges of Internet Law and Governance February 12-13, 2012 in Boulder, CO

Keynote Speakers: Michael Bennett, United States Senator for Colorado
Vint Cerf, Vice President and Chief Internet Evangelist, Google
Barry Diller, Chairman & Senior Executive, IAC & Expedia, Inc.
Julius Genachowski, Chairman, Federal Communications Commission
Larry Strickling, Assistant Secretary for Communications and Information, National
Telecommunications and Information Administration
Mark Udall, United States Senator for Colorado

The Innovation Consensus: Economic Growth in 2013 and Beyond

April 19, 2012 in Washington, DC

Keynote Speakers: Chris Coons, United States Senator for Delaware

John Zogby, Managing Director, JZ Analytics

Patents: Home on the Range or Wild Frontier?

April 24, 2012 in Boulder, CO

Keynote Speaker: David Kappos, Under Secretary, Commerce for Intellectual Property; Director, United States Patent and Trademark Office

The Changing Dynamics of Video Programming

September 4, 2012 in Boulder, CO

Keynote Speaker: Chet Kanojia, Founder & Chief Executive Officer, Aereo

The Intersection of Patent Law and Competition Policy

October 3, 2012 in Boulder, CO

Keynote Speakers: Julie Brill, Commissioner, Federal Trade Commission Judge Alan D. Lourie, US Court of Appeals for the Federal Circuit Judge Jimmie V. Reyna, US Court of Appeals for the Federal Circuit

Perspectives on Competitive Fiber Networks: Past, Present, and Future

October 9, 2012 in Boulder, CO

Keynote Speakers: Dan Caruso, Co-Founder, President, & Chief Executive Officer, Zayo Group

James Crowe, Chief Executive Officer, Level 3 Communications

Tom Ray, President & Chief Executive Officer, CoreSite

Looking Back to Look Forward: The Next Ten Years of Spectrum Policy

November 13, 2012 in Washington, DC

Keynote Speakers: Robert McDowell, Commissioner, Federal Communications Commission Jessica Rosenworcel, Commissioner, Federal Communications Commission

The Technology of Privacy

January 11, 2013 in Boulder, CO

Keynote Speakers: Julie Brill, Commissioner, Federal Trade Commission Peter Swire, Co-Chair, W3C Tracking Protection Working Group; Professor of Law, Ohio State University



Roundtables

The Silicon Flatirons Roundtable Series on Entrepreneurship, Innovation, and Public Policy is an important means of furthering Silicon Flatirons' goal of elevating the debate around technology policy issues. At these events a small group of experts from diverse backgrounds sits around one table considering multiple facets of controversial issues.

Evaluating Next Steps in Cybersecurity February 10, 2012 in Boulder, CO

Law 2.0: The New Continuum of Legal Education

February 16, 2012 in Boulder, CO

Private Equity and Venture Capital March 6, 2012 in Boulder, CO

Legal EducationMay 8, 2012 in Boulder, CO

University Outreach and Engagement: The Ground is Shifting Under Our Feet
July 17, 2012 in Boulder, CO

Startup Colorado Legal Roundtable July 24, 2012 in Denver, CO

A Template for Critical Mass: Next Steps for a Vibrant Denver Startup Scene with Denver Mayor Michael Hancock August 10, 2012 in Denver, CO IP Interconnection Arrangements: Are They Working and Are They Sustainable?
August 22-23, 2012 in Boulder, CO

Implementing Affordable Insurance Exchanges: Opportunities and Challenges? September 20, 2012 in Boulder, CO

JOBS Act
October 2, 2012 in Boulder, CO

Startup Colorado: Business Solutions October 30, 2012 in Denver, CO

Recruiting Technical Talent November 6, 2012 in Boulder, CO

Receivers, Interference and Regulatory Options

November 13, 2012 in Washington, DC

Emerging Digital Tools and Higher Education
December 5, 2012 in Boulder, CO

Energy Innovation Series

Transitioning to a sustainable low-carbon energy system poses one of the great challenges of the 21st century. The Energy Innovation series brings leaders from government, law, finance, industry, and academia to discuss key aspects of this challenge and some of the innovative approaches and solutions being fashioned across a range of sectors.

Environmental Quality Town Hall Meeting with Nancy Sutley, The President's Principal Environmental Advisor and Jared Polis, U.S. Representative January 27, 2012 in Boulder, CO

Robert Gramlich, Vice President for Public Policy, American Wind Energy Association "US Wind Energy Challenges and Opportunities"

March 1, 2012 in Boulder, CO

An Electric Grid for the 21st Century March 13, 2012 in Boulder, CO

Reinventing Fire: Bold Business Solutions for the New Energy Era September 12, 2012 in Boulder, CO

Energy Innovation Series and $5^{\rm th}$ Annual Schultz Lecture: Jeff Bingaman, United States Senator from New Mexico

October 8, 2012 in Boulder, CO

The Changing Energy Mix October 23, 2012 in Boulder, CO

Keynote Speaker: Tony Clark, Commissioner, Federal Energy Regulatory Commission

Financing Energy InnovationNovember 9, 2012 in Boulder, CO



Institute for Regulatory Law & Economics May 19-23, 2012 in Aspen, CO

The Institute for Regulatory Law & Economics (IRLE) is sponsored by the University of Colorado 's Silicon Flatirons Center as a means of supporting thoughtful regulatory decision-making. In particular, the IRLE hosts an annual seminar for state public utility commissioners and staff as well as engages in state outreach activities. In so doing, it works with two related Silicon Flatirons initiatives - the Glushko Samuelson Technology Policy Law Clinic and the Dale Hatfield Scholars and Research Program.





Support and Enable Entrepreneurship IN THE TECHNOLOGY COMMUNITY



SFC's Entrepreneurship Initiative (the "E.I.") is an Application Programming Interface (API) between CU-Boulder and the Front Range's software, Internet, robotics, and telecom startup scene. The E.I. creates a scene with high velocity campus/community interaction. When successful, this interaction evokes what Brian Eno calls "scenius" - viz., the communal form of genius.

Brad Feld's recent book Startup Communities celebrates the efforts of the E.I., now in its fifth year, as effectively having turned CU "inside out." That is, as Feld writes, "[r]ather than trying to control the discussion, or create a dedicated entrepreneurship center at CU . . . they put the word out to the Boulder startup community that Silicon Flatirons was a resource for [the startup community] to use." Consistent with this spirit of building a valuable platform for students and surrounding community, the E.I. this past year sponsored 48 events with over 6,600 attendees. A summary is below.

ANUARY

FEBRUARY | MARCH

- UNPLUGGED: Alex White, Co-Founder & CEO, Next Big Sound
- • New Tech Meetup
- UNPLUGGED: Barry Diller, Chairman and Senior Executive Officer, IAC & Expedia, Inc.
- ROUNDTABLE: Law 2.0: The New Continuum of Legal Education
- CRASH COURSE: Guerrilla PR for Startups
- 22 · · · NVC: IT Track
- 29 · · · NVC: IT Track

- 5 • UNPLUGGED: Jim Franklin, CEO, SendGrid
- • ROUNDTABLE: Private Equity and Venture Capital
- • New Tech Meetup
- • STARTUP COLORADO: Summer Preview
- • NVC: IT Track Finals
- Conference: Angel Financing -Understanding the Early Outside Money In

SILICON FLATIRONS ANNUAL ENTREPRENEURSHIP CONFERENCE AND ROUNDTABLE SERIES RESEARCH REPORTS

Our 2011 annual entrepreneurship conference, entitled Angel Financing – Understanding the Early Outside Money In, on March 22 tackled several important issues and attracted some of the nation's foremost authorities on angel investment. A conference highlight came from the keynote address by Jeff Clavier, whom Foundry Group's Jason Mendelson introduced as one of the "original" super angels. Clavier's keynote, "So you want to be an angel?" covered the promises and pitfalls of becoming an early stage investor. The Conference also highlighted the research of Jeff Sohl, Professor and Director, Center for Venture Research at the University of New Hampshire.

The Silicon Flatirons Center this year continued the Roundtable Series on Entrepreneurship, Innovation, and Public Policy. These Roundtables convene a diverse group of thought leaders in the community to address a wide variety of issues affecting the core mission of Silicon Flatirons, including private equity, internet governance, cloud computing, and the future of the legal practice. Over the past year SFC Roundtables examined angel investing, differences between venture capital and private equity, the JOBS Act, and the dynamics of successful entrepreneurial communities. In August we held a terrific Roundtable on what levers help support and hinder entrepreneurship with Denver Mayor Michael Hancock and entrepreneurial leaders from Denver.

This past year, the Roundtable Series produced several noteworthy reports:

Bringing Angel Investing Out of the Shadows

Rapporteur: Dave Mangum, Research Fellow, Silicon Flatirons Center

This Roundtable catalogued important challenges of angel financing, an important but often underexamined asset class. Silicon Flatirons Research Fellow Dave Mangum's report highlighted a number of issues, including why angels often take fewer contractual protections than venture capitalists despite investing at a more uncertain time, the use of convertible debt, and informational voids surrounding the asset class as a whole.

Law 2.0: The New Continuum of Legal Education

Rapporteur: Therese Kerfoot, Research Fellow, Silicon Flatirons Center

This Roundtable, co-sponsored by the Colorado Chapter of the Association for Corporate Counsel, focused on how legal educators can best prepare students to succeed in the "new normal" of a dynamic legal marketplace. Disruption caused by the digital revolution has changed the legal profession. The Roundtable report enumerates some of the issues faced by the legal industry and educators. The Roundtable examined the disaggregation of legal services, the need to supplement the traditional legal skills with new ones, and the inability of law firms to provide training to young lawyers. To solve these issues, Roundtable participants and the report suggest a range of solutions affecting admissions, curriculum, and continuing, post-graduate education.

A Template for Critical Mass: Next Steps for Denver's Vibrant Startup Scene

Rapporteur: Ian Kuliasha, JD Candidate 2014, University of Colorado Law School

Denver Mayor Michael Hancock and Paul Washington, Executive Director of the Denver Office of Economic Development, convened this Roundtable to identify ways to help Denver's startup scene continue to catalyze and accelerate towards a critical mass. Beginning with an overview of the Denver startup scene and what makes a great startup scene generally, Ian Kuliasha, a second year student at the University of Colorado Law School, summarized the discussion and conclusions of the participants in his report. The main points include the need to create entrepreneurial centers of gravity, support structures, and social networks; raising the credibility of the Denver scene with investors and startup communities outside of Colorado; and the need to streamline early stage fundraising.

A full list of roundtable reports can be found on page 20 and at www.silicon-flatirons.org.

- • New Tech Meetup
- NVC: Cross-Campus Finals
- Crash Course: Immigration Law for Entrepreneurs
- UNPLUGGED: Charlie Ergen, Chairman, DISH Network
- BOULDER TECH FORUM
- NVC: Mentor Night

- • New Tech Meetup
- • BOULDER IS FOR ROBOTS
- • STARTUP SUMMER: Kick-off
- • CRASH COURSE: Employment Law Myth Busters
- • STARTUP SUMMER: TechStars

- • New Tech Meetup
- • STARTUP SUMMER: Paul Berberian
- 14 • Startup Summer: Holly Hamann
- 21 • STARTUP SUMMER: Dan Caruso
- 28 · · · STARTUP SUMMER: Tim Enwall

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STARTUP COLORADO

Startup Colorado is a regional initiative to increase the breadth and depth of the entrepreneurial ecosystem across Colorado's Front Range. From Fort Collins to Boulder, from Denver to Colorado Springs, Startup Colorado's mission is to multiply connections among entrepreneurs and mentors, improve access to entrepreneurial education, and build a more vibrant entrepreneurial community. Startup Colorado's various programs will deepen the communal backdrop out of which new companies emerge. Vibrant new company creation, by extension, improves the broader economic base of Colorado.

Startup Colorado's first year saw several successes. First, and most importantly, Startup Colorado has helped to bring together the Front Range entrepreneurial community to work towards the collaborative goal of making the whole of Colorado a hotbed for entrepreneurship. Catalyzing cross-regional interaction is essential to Startup Colorado's goal to develop a more vibrant entrepreneurial community, as the diversity in locations and viewpoints creates a more fundamentally robust foundation on which startups can grow. In this respect, the acceleration of both the Colorado Springs and Fort Collins startup scenes and their connection with the Boulder-Denver scenes has been an inspiring product of Startup Colorado's efforts.

Next, Startup Summer had an impactful inaugural summer. This program seeks to bring entrepreneurially minded undergraduates to Boulder to work as interns for startups, while also participating in a variety of evening courses, geared towards developing the skills necessary to become successful entrepreneurs themselves. In its first summer, eighteen students were placed with thirteen startups, including Rally Software, Orbotix, and Simple Energy. With the help of mentors and evening classes, the Startup Summer participants developed business ideas throughout their time in the program, which they eventually pitched to a panel of judges comprised of local entrepreneurs.

Finally, Startup Colorado kicked off the START Network by hosting the Big Data Dig In, a daylong discussion surrounding the technical and legal issues facing companies as they deal with an ever increasing amount of digital information. The START Network's primary objective is to seed interaction between startups, academics, and large companies. Startup Colorado is chaired by Brad Feld, Jan Horsfall, and Phil Weiser; its Executive Director is Silicon Flatirons Fellow Ben Abell.

CROSS-CAMPUS ENTREPRENEURSHIP

The CU-Boulder campus provides the platform on which the E.I. operates and creates the context for CU students and faculty to engage with messy, bottom-up innovation. This year featured several notable initiatives for CU faculty and students.

Town Gown Series

The Info Tech Forum – aka the "Town Gown" - exposes entrepreneurs and investors from the Front Range Community to leading research at CU. In this small group setting, CU researchers give short presentations on their research and then receive feedback from participating entrepreneurs about the commercialization potential of that research. E.I. presented two Town Gown events this year. The first focused upon big data, bioinformatics, and genomics with presentations by Ken Anderson, Associate Professor and the Associate Chair of the Department of Computer Science, and Rob Knight, Associate Professor of Biophysics. The second featured Associate Professor Tammy Sumner and Professor of Computer Science Mike Eisenberg to highlight their research in the area of education technology.

Venture Capital Course

CU's unique Venture Capital class, co-taught by Foundry Group's Jason Mendelson and E.I. Director Brad Bernthal, featured a record student enrollment of over 70 MBA and JD students. The class focuses upon the challenges of entrepreneurial finance and raises the transactional IQ of Colorado Law and MBA students. A teacher's guide to the course will be publicly released in 2013.

SILICON FLATIRONS ENTREPRENEURSHIP INITIATIVE AS A COMMUNITY CONVENER

The E.I. highlights the importance of interaction within a scene. Great startup communities share much in common with other creative neighborhoods. Like 52nd Street in New York City, which in the 1930's and 40s produced bebop jazz, startup scenes facilitate networks that are marked by information spillovers, helpful competition among participants, and spontaneous interactions. The E.I. enhanced the scene this year through programs that include the New Tech Meetup, the Crash Course Series, and Entrepreneurs Unplugged.

Entrepreneurs Unplugged

The Entrepreneurs Unplugged Series promotes startup storytelling with a point. Featuring national and regional serial entrepreneurs, Unplugged showcases the stories of entrepreneurs' career paths that can lead to successful ventures, providing aspiring entrepreneurs with role models and mentors as they pursue their own ideas. The 2012 line-up included some of our best-received programs based on attendee feedback. The year kicked off with local entrepreneurs Alex White of Next Big Sound, Jim Franklin of SendGrid, and one of Colorado's most successful entrepreneurs, Charlie Ergen of DISH and Echostar. The fall lineup included Front Range entrepreneurs Holly Hamann and Rustin Banks of Blog Frog and ReadyTalk's Dan King. The series also included perspectives from outside of Colorado, with Bay-area visitors Wendy Lea of Get Satisfaction and the co-founder of Stanford's D-School, George Kembel, a true visionary in design centered thinking.

Crash Course Series

The Crash Course Series connects startups to the best minds and best practices within the Front Range's entrepreneurial community. This year's lineup was especially impactful. In four consecutive events we had Rally Software CTO (and CU Alum) Zach Nies talking about lean startup methodology; one of Colorado's most active VC's, Joe Zell, talking about startup company boards of directors; TechStars Managing Director Nicole Glaros providing sharp and insightful lessons on how to pitch a business; and Bryan Cave partner Jason Haislmaier sharing his deep and eye-opening expertise in data security and privacy.

Indirect Effects

The direct content of the E.I. offerings are valuable. It is striking, however, how important the indirect effects of the E.I. are. Informative entrepreneurship discussions are accompanied by networking where unplanned interactions occur laterally, as if arriving out of attendees' peripheral vision. The indirect connections at E.I. events are often as powerful as the direct results we intend. The phrase *information* entropy, borrowed from Princeton sociologist Martin Ruef, evokes what the E.I. accomplishes. Entropy is energy dispersal and, sometimes, is described as the presence of disorder in a system. *Information* entropy - the disorderly transfer of ideas at CU-Boulder among and between people in what has been dubbed America's most creative city - gets to the essence of the E.I. The E.I.'s information entropy highlights the importance of interaction within a scene. Providing a nerve center where the startup community connects with the CU-Boulder campus is among the E.I.'s most important contributions.

CTOBER NOVEMBER DECEMBER

- 2 • New Tech Meetup
- • UNPLUGGED: Dan King, CEO, ReadyTalk
- CRASH COURSE: Startup Communities Building an Entrepreneurial Ecosystem in Your City
- Crash Course: How to Pitch
- 29 · · · NVC: Kick-off
- ROUNDTABLE: Startup Colorado Business Solutions
- Boulder Tech Forum

- 5 • NVC: Zach Nies
- UNPLUGGED: George Kembel, Exec. Director & Co-Founder, Stanford D. School
- • NVC: Pitch Night
- CRASH COURSE: Effective Startup and Emerging Company Boards

New Tech Meetup

Spearheaded by local entrepreneur Robert Reich, the New Tech Meetup provides a forum for Front Range techies to network, socialize, and showcase their companies. At these monthly, standing-room-only meetings, local startups will give a fiveminute presentation and then receive feedback about their ideas, products. and business model. These pitches are punctuated by discussions, community announcements, job openings, and just about anything else that relates to tech. After its initial launch in Boulder, the New Tech Meetup has now expanded to Denver and Fort Collins.

- STARTUP SUMMER: Ryan Martens
- 10 • New Tech Meetup
- • STARTUP SUMMER: Hazell
- • STARTUP SUMMER: Mike Platt
- • ROUNDTABLE: Startup Colorado Legal Discussion
- 26 • STARTUP SUMMER: Joe Zell

- 2 • STARTUP SUMMER: Baldwin
- • STARTUP SUMMER: Pitch Night
- • New Tech Meetup: TechStars

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- • New Tech Meetup: TechStars
- 10 • ROUNDTABLE: Startup Colorado with Mayor Hancock

AUGUST SEPTEMBER

- 10 • CRASH COURSE: Lean Startups
- New Tech Meetup
- BIG DATA LUNCH
- UNPLUGGED: Holly Hamann & Rustin Banks Co-Founders, TheBlogFrog

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Inspire, Prepare, and Place Students in Technology and Entrepreneurial Law



Dale Hatfield Scholars & Research Program

The Dale Hatfield Scholars and Research Program is designed to encourage student interest in public service by providing grants for summer internships in government or public interest positions. With the support of many generous benefactors, the Hatfield Program has become a flagship program at the University of Colorado and has already helped to

bring many students to Washington, D.C. to take positions in government and non-profit organizations since it was established in 2006.

The Hatfield Program also honors and promotes the values that Dale has embodied during his distinguished career. From his service at the FCC and U.S. Department of Commerce to his professorship at the University of Colorado, Dale has embodied the highest ideals of service, scholarship and leadership. Hundreds, if not thousands, of technology leaders around the world have benefited from Dale's generosity of spirit and intellect. The Hatfield Program offers a great way to continue Dale's legacy.

2012 Hatfield Scholars

Tyler Cox

Federal Communications Commission, Commissioner McDowell's Office

Laura Littman

Federal Trade Commission, Bureau of Consumer Protection

Ryan Tharp

Federal Communications Commission, Chairman Genachowski's Office

Mustafa Naseem

Federal Communications Commission, Consumer and Government Affairs Bureau



PRESTON PADDEN SCHOLARS & RESEARCH PROGRAM

The Preston Padden Scholars program, through the Silicon Flatirons Center, provides summer internships in private sector organizations involving technology and communications issues in D.C.

2012 PADDEN SCHOLARS

Garrett Anderson

Akin Gump Strauss Hauer & Feld LLP

Shahar Atary

National Association of Broadcasters

Kenny Bradtke AT&T

Thomas Codevilla

News Corporation

Michael LaVigne

Hogan & Lovells LLP

Stephen Walter

The National Cable & Telecommunications Association

2012 HATFIELD & PADDEN SCHOLARS IN WASHINGTON DC WITH PRESTON PADDEN, SILICON FLATIRONS CENTER, AND MICHAEL POWELL, NATIONAL CABLE & TELECOMMUNICATIONS ASSOCIATION

WRITING COMPETITION

We are pleased to announce that the winner of this year's Writing Competition is Janna Fischer, J.D. Candidate 2012, for her paper "Big Boss Is Watching: Circumstances Under Which Employees Waive the Attorney-Client Privilege By Using E-mail at Work".

Each year, Silicon Flatirons accepts submissions of papers written about a topic involving law and technology in order to promote and encourage



among students the continued pursuit of the research, planning, organization, writing, and editing of scholarly papers in this field. This year's papers were read and judged by a panel of attorneys at Faegre Baker & Daniels, the sponsor of this contest. The winner receives a check for \$500 and an opportunity for publication in a future issue of the Journal on Telecommunications and High Technology Law published by CU Law.

STUDENT INSPIRING EVENTS

Dale Hatfield Technology Talk February 10, 2012

Student Lunch with Mike Fricklas, Executive Vice President, General Counsel and Secretary of Viacom Inc. March 22, 2012

Inspiring Students in Technology
Policy and Entrepreneurial Law Luncheon
September 27, 2012

Student Lunch with Blair Levin, Executive Director, Omnibus Broadband Initiative at Federal Communications Commission October 9, 2012

Debate: Indecent TV Programs and The Supreme Court October 18, 2012

What I Wish I Knew in Law School October 25, 2012

SILICON FLATIRONS STUDENT GROUP OFFICERS

Austin Chambers, Writing Director Daniel Henry, Knowledge Director Julie Cuypers, Outreach Director Michelle Hersh, Secretary Michael Dornik, Treasurer





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CU-BOULDER'S NEW VENTURE CHALLENGE

New Venture Challenge

The CU New Venture Challenge is the cross-campus entrepreneurship championships for CU-Boulder. The fourth year of the NVC provided a startup launch pad that

gave students hands-on experience in developing a business. Through a series of workshops and teambuilding events, students gained experience in the entrepreneurial process, furthering the E.I.'s goal of helping to foster viable startups and nurture the creative spirit of entrepreneurship within the university and surrounding community. Perhaps most valuable towards this goal are the connections made

between NVC teams and our growing army of volunteer mentors within the community. The NVC also has become one of CU's best examples of cross-campus collaboration. It is supported by several academic centers and departments on campus in addition to Silicon Flatirons, including ATLAS, the Deming Center for Entrepreneurship, the E-Ship Program at the College of Engineering, ITP, and the Music Department's Center for Entrepreneurship, making it a truly cross-campus initiative.



MOOT COURT COMPETITION

Colorado Law participated in the 2012 National Telecommunications Moot Court Competition on Friday and Saturday, February 10-11, 2012. The annual competition, hosted by Catholic University's Columbus School of Law in Washington D.C., is the premier moot court event in the area of telecom law. In 2011, Colorado Law's team won the national title. The 2012 team, comprised of Shahar Atary, Tyler Cox, and Andrew Sharp, parsed the moot court problem involving the decision to shut down a municipal telecom network. The team did not advance past the preliminary rounds, however, they performed at a high level and gained valuable experience in the competition.

TELECOM FALL CHALLENGE

The Telecom Fall Challenge is a partnership with Silicon Flatirons and the Interdisciplinary Telecommunications Program (ITP) in which teams of students are assigned a research topic and present a paper that is judged by a group of telecom industry leaders and faculty members.

This year's fall challenge, led by Research Fellow Madelaine Maior, focused on the question of whether the FCC should mandate minimum receiver performance standards to encourage more efficient use of wireless spectrum. Stephen Walter, a 2nd year law student and three ITP graduate students, Nishant Arora, Tripti Attavar, and Jagadeesh Dhandapaani, won first place.

MASTER OF LAWS (LL.M.)

The LLM in Entrepreneurial Law is one of the only LLM programs of its kind nationwide and provides the expertise needed to serve emerging companies as both outside and in-house counsel. It has already received national media attention in The Wall Street Journal Law Blog and The National Law Journal. The program focuses on critical aspects of transactional practice such as intellectual property, securities, deals, and general corporate law. Rigorous academics are combined with experiential learning opportunities through the Entrepreneurial Law Clinic and substantial legal research and scholarship.

The LLM in IT & IP Law provides graduates a competitive advantage as technology and intellectual property attorneys who are legitimate scholars in their fields and have a superior understanding of their clients' needs. The program provides the full range of transactional practice areas such as copyright, patent, trademark, telecommunications, information privacy, and computer law. LLM students will produce a significant work of scholarship and connect with future clients through the Technology Law & Policy Clinic.

Law Clinics

The Samuelson-Glushko Technology Law & Policy Clinic (TLPC), led by Associate Professor Brad Bernthal, provides students an opportunity to get involved in technology, law and regulation. Clinic students tackle projects which impact policy and, thanks to support from Patton Boggs LLP, visit policy makers in Washington D.C. Illustrative projects from 2012 involved advocacy before the Federal Energy Regulatory Commission concerning standards to harden the electrical grid against the threat of solar flares, proposed legislation in Colorado to permit autonomous driving vehicles, and a request for an exemption for on behalf of blind and print-disabled users of ebooks to the Digital Millennium Copyright Act in connection with the Copyright Office's Triennial review. The DMCA request proved successful and the Copyright Office cited the TLPC's work in support of the decision.

The Entrepreneurial Law Clinic (ELC), led by Associate Professor Brad Bernthal, provides law students with unique, practical experience in transactional law while offering valuable legal services without charge to local businesses that lack access to venture capital or angel investor resources. By assisting entrepreneurs when they need help the most, the ELC provides Colorado Law students hands-on opportunities to make a difference in the community. The Clinic assisted over 20 clients in 2012, including startup companies founded by graduate students and local entrepreneurs. The Clinic also provided community outreach presentations on legal topics for microbusiness entrepreneurs, especially women starting businesses with limited resources in Denver. The summer ELC was led by Cooley LLP attorney Mike Platt and focused on assistance to companies admitted to Boulder's prestigious TechStars program.



2012 CALENDAR OF EVENTS

JANUARY

New Tech Meetup

CU New Venture Challenge: Bootcamp

Student Event: Silicon Flatirons Student Group Lunch CU New Venture Challenge: IT Track, Module 1

Energy Series: Jared Polis

Crash Course: 15 Years of Consumer Internet Industry

FEBRUARY

Student Event: Hatfield and Padden Scholars Entrepreneurs Unplugged: Alex White

New Tech Meetup

CU New Venture Challenge: IT Track, Module 2 Student Event: Dale Hatfield Technology Talk Roundtable: Evaluating Next Steps in Cybersecurity

Hatfield Professorship Banquet

Conference: Digital Broadband Migration: The Challenges of

Internet Law and Governance

Entrepreneurship: Senator Mark Udall and the Startup

Community

Colorado In-House Counsel Series: The Changing Dynamics of

Technology and Outsourcing

Roundtable: Law 2.0: Continuum of Legal Education

Crash Course: Guerrilla PR for Startups

CU New Venture Challenge: IT Track, Module 3 CU New Venture Challenge: IT Track, Module 4

MARCH

Energy Series: Robert Gramlich
Entrepreneurs Unplugged: Jim Franklin
Roundtable: Private Equity and Venture Capital

New Tech Meetup

Startup Colorado: Summer Preview

Conference: An Electric Grid for the 21st Century CU New Venture Challenge: IT Track Finals

Conference: Angel Financing - Understanding the Early

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Outside Money In

Hatfield Professorship Reception - Washington, DC



APRIL

New Tech Meetup

CU New Venture Challenge: Cross-Campus Finals Crash Course: Immigration Law for Entrepreneurs

Entrepreneurs Unplugged: Charlie Ergen

Boulder Tech Forum

Conference: The Innovation Consensus: Economic Growth in

2013 and Beyond

Conference: Patents: Home on the Range or Wild Frontier?

CU New Venture Challenge: Mentor Night

MAY

New Tech Meetup

Student Event: Student Appreciation Lunch

Boulder is for Robots

Roundtable: Legal Education

Workshop: Institute for Regulatory Law & Economics

Startup Summer: Kick-Off

Crash Course: Employment Law Myth Busters

Workshop: Faculty Lecture (Ayal) Startup Summer Class: TechStars

UNE

Startup America Summit

New Tech Meetup

Startup Summer Class: Paul Berberian Startup Summer Class: Holly Hamann Startup Summer Class: Dan Caruso Startup Summer Class: Tim Enwall JULY

Startup Summer Class: Ryan Martens

New Tech Meetup

Startup Summer Class: Don Hazell

Roundtable: Law Outreach Startup Summer Class: Mike Platt

Roundtable: Startup Colorado Legal Discussion

Startup Summer Class: Joe Zell

AUGUST

Startup Summer Class: Micah Baldwin Startup Summer Class: Pitch Night

New Tech Meetup: TechStars

Roundtable: Startup Colorado with Mayor Hancock Roundtable: IP Interconnection Arrangements: Are They

Working and Are They Sustainable?

SEPTEMBER

Conference: The Changing Dynamics of Video Programming

Crash Course: Lean Startups

New Tech Meetup

Startup Colorado: Big Data Lunch

Energy Series: Reinventing Fire - Bold Business Solutions for

the New Energy Era

Roundtable: Implementing Affordable Insurance Exchanges -

Opportunities and Challenges

Entrepreneurs Unplugged: Holly Hamann and Rustin Banks

Student Event: Tech Law Luncheon



OCTOBER

Roundtable: JOBS Act Apps Privacy Summit

New Tech Meetup

Conference: The Intersection of Patent Law and

Competition Policy

Energy Series: Senator Jeff Bingaman

Student Event: Blair Levin

Conference: Perspectives on Competitive Fiber Networks -

Past, Present, and Future

Entrepreneurs Unplugged: Dan King

Crash Course: Startup Communities - Building an

Entrepreneurial Ecosystem in Your City

Debate: Indecent TV Programs and The Supreme Court Conference: The Changing Energy Mix

Crash Course: How to Pitch

Student Event: What I Wish I Knew in Law School

CU New Venture Challenge: Kick Off

Roundtable: Startup Colorado Business Solutions

Boulder Tech Forum

November

CU New Venture Challenge: with Zach Nies Roundtable: Recruiting Tech Stars to CU Entrepreneurs Unplugged: George Kemble Conference: Financing Energy Innovation

Telecom Fall Challenge

CU New Venture Challenge: Pitch Night

Conference: Looking Back to Look Forward - The Next Ten Years of Spectrum Policy

Roundtable: Receivers, Interference and Regulatory Options

Crash Course: Effective Startup and Emerging

Company Boards

DECEMBER

Entrepreneurs Unplugged: Wendy Lea New Tech Meetup

Roundtable: Emerging Digital Tools and Higher Education Crash Course: Data Security and Privacy Startup Colorado: Big Data Dig In

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SILICON FLATIRONS IN THE NEWS, FLATIRONS REPORTS, AND PUBLICATIONS

2012 SILICON FLATIRONS REPORTS

Cybersecurity: Towards A Strategy for **Securing Critical Infrastructure from** Cyberattacks

Author: Therese Kerfoot

Law 2.0: The New Continuum of Legal Education

Author: Therese Kerfoot

Private Equity and Venture Capital: What's the Difference?

Author: Dave Mangum

The Challenges and Opportunities for **Public Safety Communications: The Adams County Case Study** Author: Christopher Cook

Bringing Angel Investing Out of the Shadows

Author: Dave Mangum

Efficient Interference Managment: Regulation, Receivers, and Right Enforcement

Author: Madelaine Maior

Internet Governance: The Role of Multistakeholder Organizations Authors: Joe Waz and Phil Weiser

> Full reports can be found at www.silicon-flatirons.org

Denver Post Article About Silicon Flatirons' Unplugged Event with Charlie Ergen

CU Law School's Ohm to Help FTC Monitor Online Privacy

May 21, 2012

Paul Ohm, an associate professor at the University of Colorado Law School, has been appointed to the Federal Trade Commission's Office of Policy Planning as a senior policy adviser. Ohm is regarded as an authority in online privacy matters and formerly was a federal prosecutor with the U.S. Department of Justice's Computer Crime and Intellectual Property Section.

Outdated Ownership Rules Compulsory License; Testimony of Preston Padden July 24, 2012

Dick Green Wins an Emmy

October 8, 2012

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Courtesy of Multichannel News and Todd Spangler

Former CableLabs president and CEO Dick Green, Netflix and the Adobe Pass "TV Everywhere" authentication system are among the recipients of the Academy of Television Arts & Sciences' 64th Primetime Emmy Engineering Awards. Green, who headed CableLabs from its inception in May 1988 until his retirement in 2009, is the recipient of the Charles F. Jenkins Lifetime Achievement Award, which honors "a living individual whose ongoing contributions have significantly affected the state of television technology and engineering," ATAS said. "I am surprised and honored to have received this very prestigious award from the Academy," Green wrote in an email to Multichannel News. In announcing the award, ATAS noted that Green "guided the cable industry through the transition from its analog roots to the broadband architectures of today, stressing interoperability and standardization across a broad range of operators and suppliers."

The Role of Receivers in a Spectrum Scarce World; Testimony of Pierre de Vries November 29, 2012

2012 AFFILIATED FACULTY PUBLICATIONS

Boyd, William, Genealogies of Risk: Searching for Safety, 1930s-1970s, 39 Ecology Law Quarterly

Boyd, William, Law, Environment, and the Non-Dismal Social Sciences, 8 Annual Review of Law & Social Science (2012) (with Douglas A. Kysar and Jeffrey J. Rachlinski).

Boyd, William, Overview of Subnational Programs to Reduce Emissions from Deforestation and Forest Degradation (REDD) as Part of the Governors' Climate and Forests Task Force. EPRI, Palo Alto, CA. 1023811. (2012) (with D. Nepstad, J. Niles, A. Azevedo, T. Bezerra, K. Schwalbe, B. Smid, C. Stickler, R. Vidal).

Boyd, William, Reframing REDD+, Instituto de Pesquisa Ambiental da Amazônia (IPAM), (2012) (with D. Nepstad, P. Moutinho, A. Azevedo, T. Bezerra, B. Smid, M. Stabile, C. Stickler, O. Stella).

Ohm, Paul, The Fourth Amendment in a World Without Privacy, 81 Miss. L.J. 1309 (2012).

Peppet, Scott R., Freedom of Contract in an Augmented Reality: The Case of Consumer Contracts, 59 UCLA Law Review 676 (2012).

Peppet, Scott R., Privacy & the Personal Prospectus: Should We Introduce Privacy Agents or Regulate Privacy Intermediaries?, 97 Iowa L. Rev. Bull. 77 (2012).

Schwartz, Andrew, The Perpetual Corporation, 80 Geo. Wash. L. Rev. 764 (2012).

Weiser, Philip J. (with Benjamin, Shelanski & Speta), Telecommunications Law and Policy, (3d ed. 2012)

SILICON FLATIRONS FELLOWS

Silicon Flatirons Fellows include individuals with a wide range of interests and experiences. They strive to facilitate various initiatives with the benefit of knowledge and experiences outside of traditional academia.

SENIOR FELLOWS



Dale Hatfield Adjunct Professor University of Colorado Former Chief Engineer Federal Communications Commission



Preston Padden Adjunct Professor University of Colorado Former Executive Vice President Walt Disney Company



Doug Sicker DBC Endowed Professor, Computer Science: Director, Interdisciplinary Telecommunications Program University of Colorado

SENIOR ADJUNCT FELLOWS



Mark Cooper Director of Research Consumer Federation of America



Leslie Harris President and Chief Executive Officer Center for Democracy and



Gigi Sohn President and Co-founder Public Knowledge



Pierre de Vries Former Chief of Incubation & Senior Director of Advanced Technology and Policy Microsoft Corporation



Gene Kimmelman Senior Associate, Global Partners Director of Internet Freedom and Human Rights Project, New America Foundation



Bryan Tramont Partner Wilkinson Barker Knauer, LLP



Raymond Gifford Partner Wilkinson Barker Knauer, LLP Former Chairman Colorado Public Utilities Commission



Tom Lookabaugh Vice President, Commerical Mobility ViaSat



Comcast Corporation



Richard Green ITP Professor University of Colorado Former Pres. & Chief Exe. Officer



Jonathan Sallet Partner O'Melveny & Myers LLP

Entrepreneurship and New Venture Challenge

RESEARCH FELLOWS

Therese Kerfoot

Technology Policy

Entrepreneurship and Startup Colorado

Madelaine Maior Spectrum Policy

Charles Duan Privacy

Dave Mangum

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Entrepreneurship and Startup Colorado

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Affiliated Faculty

A large part Silicon Flatirons' reputation stems from its impressive list of affiliated faculty. Within the law school, Silicon Flatirons benefits from the involvement of faculty specializing in telecommunications, entrepreneurship, intellectual property, and privacy. In addition, faculty from Computer Science, Electrical and Computer Engineering, Economics, the Leeds School of Business, and the Interdisciplinary Telecommunications Program provide diverse ideas, guidance, and enthusiastic support for Silicon Flatirons conferences and other initiatives.

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Institute Director of ATLAS
University of Colorado

BRAD BERNTHAL

Associate Clinical Professor of Law Interdisciplinary Telecommunications Program, University of Colorado Entrepreneurship Initiative Director Silicon Flatirons Center

WILLIAM BOYD

Associate Professor of Law University of Colorado

ALICIA BRILLON

Reference Librarian University of Colorado

TIM BROWN

Professor of Electrical & Computer Engineering Interdisciplinary Telecommunications Program, University of Colorado

VICTOR FLEISCHER

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DIRK GRUNWALD

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Interdisciplinary Telecommunications Program,
University of Colorado

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Kai Larsen

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Associate Professor Leeds School of Business University of Colorado

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KEITH MASKUS

Professor of Economics Associate Dean for Social Sciences University of Colorado

DIANA MOSS

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American Antitrust Institute
Adjunct Professor of Economics
University of Colorado

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Associate Professor of Law University of Colorado

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Library Director
University of Colorado

PAUL OHM

Associate Professor of Law University of Colorado (on leave) IP/IT Intiative Director Silicon Flatirons Center

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University of Colorado

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Chief Executive Officer and Co-Founder
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Assistant Professor of Economics University of Colorado

ANDREW A. SCHWARTZ

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University of Colorado at Denver

PHIL WEISER

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University of Colorado
Executive Director
Silicon Flatirons Center













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Advisory Boards

Silicon Flatirons Advisory Board

Silicon Flatirons' past accomplishments are the rational result of its impressive board. Members of the board include successful venture capitalists, top executives at publicly traded corporations, and partners at large law firms. Their wisdom and guidance have been invaluable. The Board has helped Silicon Flatirons to set and achieve its objectives, and provided the inspiration to explore new paths.

Ryan C. Arney

Partner

Davis Graham & Stubbs, LLP

Brad Bernthal

Assoc. Clinical Professor of Law University of Colorado; Entrep. Initiative Director Silicon Flatirons Center

Dan Caruso

Co-Founder, President & CEO Zayo Group

Norton Cutler

Of Counsel
Perkins Coie

Steve Davis

Senior VP of Policy and Law CenturyLink

Stanton Dodge

Exe. VP, General Counsel, & Sec.
DISH Network

Craig Donaldson

Senior VP, Regulatory Affairs

Michael L. Drapkin

Partner
Holland & Hart LLP;
Adjunct Faculty
University of Colorado

Jill Dupré

Associate Director of ATLAS University of Colorado

Brad Feld

Managing Director
Foundry Group

Raymond Gifford

Partner
Wilkinson Barker Knauer, LLP;
Senior Adjunct Fellow
Silicon Flatirons Center

Richard Green

Senior Adjunct Fellow Silicon Flatirons Center Former President and CEO CableLabs

Jason Haislmaier

Partner
Bryan Cave LLP;
Adjunct Faculty
University of Colorado

Bryan H. Hall

Sen. VP, General Counsel & Sec. Liberty Global, Inc.

Natalie Hanlon-Leh

Partner
Faegre Baker Daniels

Dale Hatfield

Senior Fellow
Silicon Flatirons Center;
Adjunct Professor
University of Colorado

David Huberman

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Justin C. Konrad

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Comcast

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Associate Professor of Law University of Colorado; IT/IP Initiative Director Silicon Flatirons Center

Preston Padden

Senior Fellow
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Adjunct Professor
University of Colorado

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VP Federal Government Relations tw telecom inc.

Evan Rothstein

Partner

Dorsey & Whitney LLP

John Ryan

Chief Legal Officer
Level 3 Communications

Lisa Scalpone

VP of Legal and Government Affairs WildBlue Communications

Douglas Sicker

DBC Endowed Professor, Computer Science Director, Interdisciplinary Telecommunications Program University of Colorado

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Dean
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Silicon Flatirons Center

David B. Wilson

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Holland & Hart LLP

Sue Wyman

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Jivaro Group and JivaroCXO

Michael Zeisser

Senior Vice President
Liberty Media Corporation

Joe Zell

General Partner
Grotech Ventures

Lee Zieroth

Senior VP & General Counsel CableLabs

Entrepreneurship Advisory Board

Boulder is recognized as having a thriving venture capital and entrepreneurship community. Silicon Flatirons is fortunate to benefit from this active, generous community. In addition to students and professors from the law and business schools, the Entrepreneurial Advisory Board consists of venture capitalists, successful entrepreneurs, top executives at established companies, and attorneys with a variety of pertinent specialties.

Brad Bernthal

Assoc. Clinical Professor of Law University of Colorado; Entrep. Initiative Director Silicon Flatirons Center

Dan Caruso

Co-Founder, President & CEO Zayo Group

David Cohen

Founder & CEO
TechStars

Elizabeth Cook

Founder, President, & Director Philanthropiece

Howard Diamond

Chief Executive Officer, Aventura

Dave Drach

Managing Director
Microsoft Emerging Business Team

Tim Enwall

Principal
Comstock Ventures

Brad Feld

Managing Director Foundry Group

David Jilk

Founder
Standing Cloud, Inc.

Laura Kornish

Assoc. Professor, Leeds School of Business University of Colorado

Richard Levin

Counsel Baker Hostetler

Krista Marks

CEO & Co-Foudner
Kerpoof

Jana Matthews

Cheif Executive Officer
The Jana Matthews Group;
Program Director
ANZ Innovyz START (Adelaide, AU)

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Nancy Pierce

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Robert Reich

Founder

Developers Cooperative

Trish Rogers Partner

Moye White

Daniel Sherwinter

Attorney

Attorney
Marsh Fischmann & Breyfogle

Nancy Stevens

Chairman First Western Trust Bank

Michael Zeisser

Senior Vice President Liberty Media Corporation

loe Zell

General Partner
Grotech Ventures

IT & IP Advisory Board

The inherently technical nature of information technology and intellectual property results in unique legal and policy issues. Approaching such issues requires an understanding of engineering and computer science, in addition to traditional legal knowledge. In this complex environment, Silicon Flatirons benefits immeasurably from its IT & IP Advisory Board, which includes leaders in the educational, entrepreneurial, and legal communities.

Jud Cary

VP, Video Tech. Policy and Deputy General Counsel

Michael L. Drapkin

Partner
Holland & Hart LLP;
Adjunct Faculty
University of Colorado

Jill Dupré

Associate Director of ATLAS University of Colorado

Phil Gordon Partner

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