

USC Viterbi

School of Engineering
*Technology Innovation
and Entrepreneurship*



Office of Technology Innovation and Entrepreneurship

Ellis Meng

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Professor Biomedical Engineering & Electrical and Computer Engineering

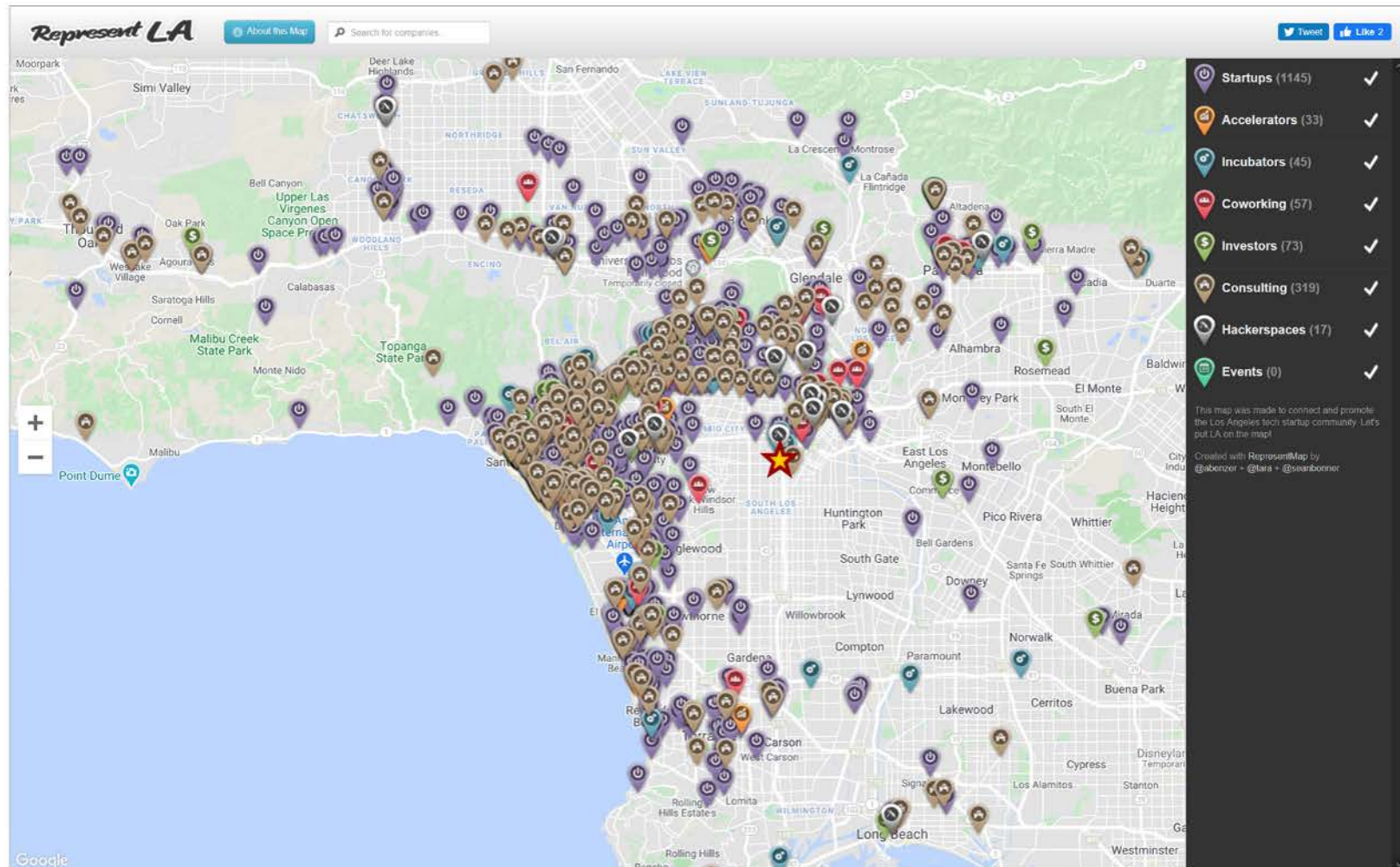
Biomedical Microsystems Laboratory

- The Viterbi School Office of Technology Innovation and Entrepreneurship will:
 - Educate engineers on strategies to invent, develop, integrate, and sustain technologies that address significant needs
 - Launch ventures with meaningful social and economic impact based on USC faculty, staff, students, and technologies
 - Promote an ethical and inclusive technology innovation and entrepreneurship ecosystem

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 - Promote an ethical and inclusive technology innovation and entrepreneurship ecosystem
- We are separate from USC Stevens Center for Innovation which is our technology transfer office. For students and postdocs, see the following:
<https://research.usc.edu/files/2018/01/Student-memo-1.8.17.pdf>

The tech startup scene in Los Angeles



Cool facts about the LA tech startup scene

- Los Angeles (LA) has the 3rd largest GDP in the world after Tokyo and New York
- LA is the 3rd largest tech ecosystem in the US
- LA is fastest growing tech ecosystem in the US
- LA companies raised \$6.4B in 2018
- LA ranks first in 3 industries: gaming, e-commerce, and online media
 - Emerging sectors include: VR/AR, e-sports, transportation, and aerospace
- LA is the manufacturing capital of the US
- LA graduates more engineers than any other US city
- SCilicon Beach is home to >500 technology companies

Curriculum (to name a few classes)

- ENGR 100 Engineering Honors Colloquium
- ENGR 102 Freshman Academy
- ENGR 493 Disruptive Technologies with an Entrepreneurial Mindset (coming in 2022)
- ENGR 499 Technology Development and Commercialization
- CE 486 Innovation in Engineering Design for Global Crises
- ISE 585 Strategic Management of Technology
- CSCI 599 Innovation for Defense Applications
- ITP courses in Innovation: The Digital Entrepreneurship Minor
 - <https://itp.usc.edu/academics/innovation-digital-entrepreneur/>

- VSI² supports student exploration of technology innovation and entrepreneurship to create impact through:
 - Co-curricular competitions and experiences
 - Classes and class modules in VSoE
 - Office hours that provide personalized mentoring and support to individuals and teams
 - Opportunities to support TIE programming

Atoms, Bits, and Cells (ABC) Undergraduate Prizes

- 3 prizes of \$1000 per team
 - Atoms: engineering hardware projects
 - Bits: digital projects such as mobile and web apps including AI, ML applications
 - Cells: biomedical or bioengineering projects
- Info Session: end Oct/early Nov
- Applications due in January
- Participate in VSI² workshops
- <http://viterbiinnovation.usc.edu/abc/>

Hacking for Defense (H4D)

- CSCI 599 Innovation for Defense Applications (Spring 22)
- Taught by combination of faculty (Prof. Neuman) and military experts
 - Learn about real national security issues
 - You do not need to be a US citizen
 - We sent a team to the Pentagon!
 - Includes networking with military leadership
- <http://viterbiinnovation.usc.edu/h4d/>



Maseeh Entrepreneurship Prize Competition (MEPC)

- Flagship competition
- \$50,000 grand prize
- Participate in VSI² workshops
- Free legal services to top teams
- Stay tuned and join us!
 - Info Session General: 9/10, 12:30p
 - Applications Open: 9/10
 - Applications Due: 10/24
 - Kick-off + Orientation: 11/18, 4p
 - First Workshop: 12/2, 12p
 - Semi-finals: 4/7, 4p
 - Finals: April



To learn more and stay tuned:

<https://viterbiinnovation.usc.edu/mepc/>

Min Family Challenge (MFC)

- Focus: support student use of engineering and technology to develop sustainable and effective solutions for global problems, positively affecting the greater society
 - UN SDGs as a framework
 - \$50,000 grand prize
 - Free legal services to top teams
-
- Info Session: 9/8, 2p
 - Applications due: 11/1, 11:59p
 - Participate in VSI² workshops
 - Present to investors at our finals event
 - <http://viterbiinnovation.usc.edu/mfc/>

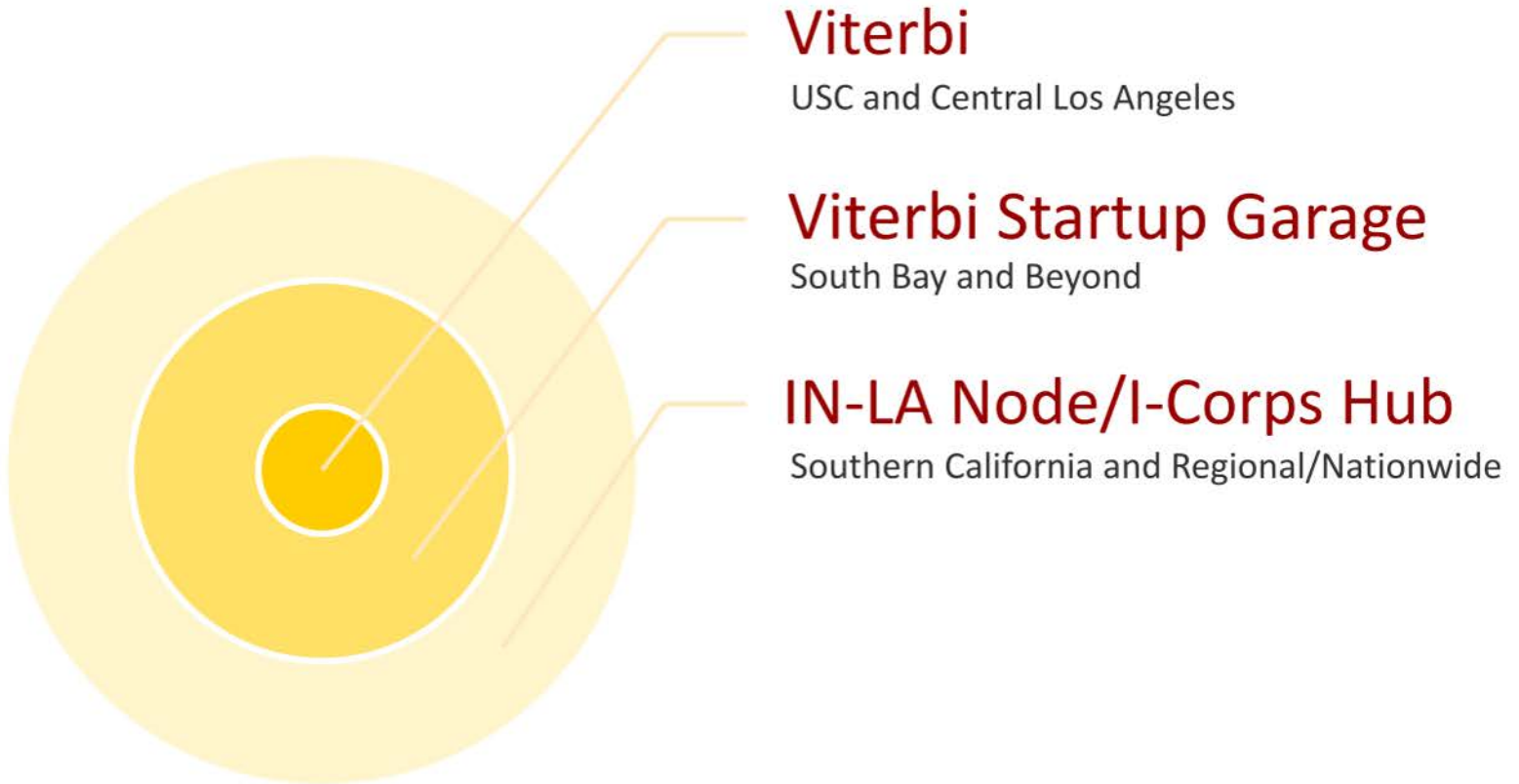


Additional Programs

- Viterbi Venture Fund – funding to help teams launch
- There are many other programs on campus in other schools and programs!
- Note: Check out the new Baum Family Maker Space!



10,000 foot view of OTIE



Viterbi Startup Garage



- Year-round incubator for early-stage technology startups located in Marina Del Rey
- Home for investor screenings
- Academic year: Home of multiple events
- Summer: Home of Summer Smasher program – immersive student internship experience
- <http://viterbiinnovation.usc.edu/vsg/>



- Objective: Broaden student experience beyond traditional engineering curriculum
- VSoE interns join startup companies in VSG
- Guided sessions to help maximize your experience
- Info session in late Feb
- Applications ~March
- <http://viterbiinnovation.usc.edu/summer-smasher/>

Innovation Corps (“I-Corps”)

- Support to commercialize technologies developed in universities
- \$50,000 grant from the National Science Foundation
- Must have intellectual property in deep tech (no apps)
- ZAP! Training can be used to qualify for the national program
- ZAP! also enables you to present at annual Technology Scouting Workshop (speakers from Amazon, Boeing, Google, Dow, NASA, Virgin Orbit, J&J JLABS, and more!)
- <http://lanode.org/zap/>



USCViterbi
School of Engineering

630+ teams and 20 members!

\$1.4B+ raised

UCLA

 **USC** University of
Southern California

Caltech



University of Colorado
Boulder

UC RIVERSIDE
UNIVERSITY OF CALIFORNIA

UCSB

UCI University of
California, Irvine

CSUN | CALIFORNIA
STATE UNIVERSITY
NORTHridge

ASU
ARIZONA STATE UNIVERSITY

 **N** University of Nevada, Reno

UC San Diego

**Cal
State
LA**

W
UNIVERSITY of
WASHINGTON

 **THE UNIVERSITY
OF ARIZONA**

 **LACLEANTECH
INCUBATOR**
at La Kretz Innovation Campus

 **SUNY** The State University
of New York

NEW RELATIONSHIPS:

 **THE
UNIVERSITY
OF UTAH**

 **THE UNIVERSITY OF
NEW MEXICO**

 **COLORADO SCHOOL OF
MINES**

UNLV
UNIVERSITY OF NEVADA LAS VEGAS

- Not sure where to go?
- Not sure how to start?
- Join us for office hours with mentors and investors
- Email Prof. Trina Gregory – trinagre@usc.edu

- We need help to support our programs during the year and in the summer
 - ENGR 102 engineering entrepreneurship instructors
 - Competitions
 - Summer Smasher TA
 - High school program TA and facilitators
- Look out for our postings!

- Many activities to promote innovation and entrepreneurship in Viterbi
- Seeking input on what other programming would be helpful
- Take advantage of all the other programs across the campus too!

Atoms Bits and Cells Competition



Trina Gregory



Engineering Honors Program, Student Programs, and Courses



David Gerber



Trina Gregory



Denise McKenzie



Cliff Neuman



Farzin Samadani

Min Family Challenge



David Gerber



Trina Gregory



Susan Angus



Commission on Voluntary
Service & Action

Maseeh Entrepreneurship Prize Competition



Denise McKenzie



Rob Schoeben



Hovig Tchalian



Lloyd Greif Center
for Entrepreneurial Studies

USC Marshall
School of Business

Viterbi Startup Garage



Dave Eastman



Arcelia Navarro

Viterbi Venture Fund



Dave Eastman

NSF I-Corps



Dave Eastman



Precious McClendon



Arcelia Navarro



Jason Ordonez

Sign up for our mailing list

- Sign up here:
<https://tinyurl.com/ViterbiTIEinfo>
- Or use the QR code →
- Get updates on events and competitions
- Please be on the lookout for future Tech Startup Networking events brought to you by USC Viterbi TIE Office



Questions? Stay and Network!



- VSEE: entrepreneurial mindset in Freshman Academy
- ENGR 100, 493, 499, CE 486, ISE 585, H4D, and other courses
- Summer Smasher: immersive experience with start-ups
- TIE Summer Program

- Competitions (incl. MEPC, MFC, ABC Prize, NAE)
- External pitch competitions
- Engineering Honors Program – Innovation Track
- Office Hours

<http://viterbiinnovation.usc.edu>

<http://lanode.org>

viterbi-innovation@usc.edu

Sign up for our mailing list: <https://tinyurl.com/ViterbiTIEinfo>

- NSF I-Corps Programing (incl. ZAP, BOOM, LAUNCH, BLITZ, National I-Corps)
- Summer Innovation Fellowship

- Synchrotron, VSG accelerator program
- Technology Scouting Workshop
- Faculty seminars

- Full-time residency at the Viterbi Start-up Garage
- Viterbi Venture Fund

