

Discover UCLA Engineering

MAE Faculty Panel

Jeff Eldredge

*Professor
MAE Vice Chair for
Undergraduate
Programs*

Eric Chiou

*Professor
MAE Vice Chair for
Graduate Programs*

Tyler Clites

Assistant Professor

Tim Fisher

*Professor
MAE Department Chair*

Pirouz Kavehpour

Professor

Adrienne Lavine

*Professor
Associate Vice
Provost, Center for the
Advancement of
Teaching*

Brett Lopez

Assistant Professor

T-C Tsao

Professor

Professor Jeff Eldredge

- I have been a Professor in MAE at UCLA for nearly 18 years. I have served as MAE Vice Chair for Undergraduate Programs for the past two years
- My area of expertise is in Fluid Dynamics, which is the study of how liquids and gases behave when they flow
- My research students work on **computer modeling** of the
 - Aerodynamics of agile aircraft
 - Cardiovascular system
 - Controlled motions of small particles in fluids (like cells)
- I am constantly amazed by UCLA students, by their ingenuity, their collaboration, and their ability to get things done.

Professor Eric Chiou

- I have my BS degree in Mechanical Engineering and MS and PhD degrees in Electrical Engineering.
- I have been a Professor in MAE at UCLA for 15 years
- My areas of expertise are in micro and nano manufacturing and photonics and microfluidics devices for biomedical applications. I love the types of research that utilizes new physical mechanisms on conventional tool technologies. For examples, I utilize light energy to make a tweezer, a sorter, and a knife.
- UCLA engineering school is great since it provides a highly flexible environment to support people like me to do cross disciplinary research.

Professor Tyler Clites

- I'm a new Assistant Professor in MAE, with joint appointments in Orthopaedic Surgery and Bioengineering.
- My area of expertise is in bionic systems for human rehabilitation and augmentation. In my lab, we use precision engineering and novel surgical techniques to engineer body and machine in parallel.
- I have found UCLA to be an extremely welcoming place, filled with people who are eager to work together to solve some of the world's biggest problems.



Professor Tim Fisher

- I have been a Professor in MAE at UCLA for nearly 4 years, after spending 15 years at Purdue
- My area of expertise is in Thermal Sciences and Engineering, focused on nanomaterials, solar-thermal manufacturing, and heat transfer in aerospace technologies (hypersonics, propulsion systems, avionics)
- I think UCLA engineers are exceptionally innovative and creative, on top of having excellent math and science skills; these attributes are particularly apparent in our engineering student club projects and undergraduate research

Professor Pirouz Kavehpour

- I have been a Professor in MAE at UCLA for nearly 17 years
- My area of expertise are in Fluid Dynamics, which is the study of how liquids and gases behave when they flow, and Heat Transfer, which is the study of how thermal energy is behaving.
- I think UCLA is filled with superbright students who constantly amaze me with their ingenuity, their collaboration, and their ability to get things done. Also, our basketball team is awesome!

Professor Adrienne Lavine

- I have been a professor in MAE at UCLA for almost 37 years.
- My research area is Heat Transfer, the study of how thermal energy (heat) is transferred, or flows, within natural and engineered systems. Applications are extremely broad, such as how our bodies maintain their temperature, how to store solar energy for nighttime use, or how to manage temperatures of spacecraft.
- UCLA's students are awesome. Not only are they bright, energetic, and diverse, they have also been very understanding and adaptable during remote instruction.

Professor Brett Lopez

- I will become a Professor in MAE at UCLA in Summer 2021
- My area of expertise is Aerial Robotics & Controls with an emphasis on developing provably safe autonomy algorithms that can be deployed in diverse environments
- UCLA engineers develop a strong foundation in core engineering areas while also gaining invaluable hands-on experience through research and student club projects. The combination of fundamental and practical knowledge makes UCLA engineers some of the best and most innovative in the world!

Professor T-C. Tsao

- I have been a Professor in MAE at UCLA for nearly 22 years
- My area of expertise is in Dynamic Systems and Controls, which is the study of mathematical science and engineering technology that enable modern vehicles, robots, and autonomous systems.
- I think UCLA MAE is a community with a culture of collegiality, collaboration and excellence. I believe that the UCLA AE and ME curricula are more comprehensive and rigorous compared to several peer schools (don't ask me which schools). In addition, many students are immersed in engineering clubs honing social and technical skills. Not the least, foods in UCLA dorms and campus are healthy and delicious!

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