# MEGAN LIM

#### meganlim@berkeley.edu

meglim.com

medium.com@megamberlim

### **EDUCATION**

UC Berkelev. Junior.

B.S. in BioEngineering.

Some Fav Coursework: Organic Chem. Quantum Mechanics. Lin Alg & Diff Eq. Multivariable Calculus. CS Programs. EE Medical Devices. Drug Delivery (Grad). Neural Engineering (current). Machine Learning for Chemistry (current).

Class of 2016. Troy High School.

Valedictorian.

#### WORK EXPERIENCE

### NASA Tech Intern (Jun - Aug 2018).

NASA Ames Research Center.

- Focus: Diagnostics and Prognostics (D&P) Research Group algorithms.
- Outreach: Presented project, The Kalman Kick, at NASA Intelligent Systems Division showcase among 5 other selected interns, interviewed for Kiwoba Allaire's Girl STEM Stars video.
- Supported D&P Open-Source software release: Designed and compiled an example system model in C to be included in the Diagnostic Reasoner (DR) algorithm software release.
- Technical writing: DR software user manual, Prognostics Metrics Library Github wiki, and Generic Software Architecture for Prognostics (GSAP) 19 pg wiki.

### Medium Writer & Editor (2016 - Present).

50+ articles published.

- Writer for 3 of Medium's Top 5 publications: The Mission, The Startup, The Writing Cooperative.
- Founder and editor of publication: Unicorns in Hoodies.
- Top stories: Kalman Filters, Education, Chaos, Molecular Orbital Diagrams.

### GenEdit BioE & Chem Research Intern (Jan 2019 - Present).

Murthy Lab, Berkeley.

• Part time intern at the startup, GenEdit, testing gene editing therapeutics(CRISPR) and drug delivery.

### UCSF Undergrad Researcher (Aug 2017 - Nov 2018).

Wang Lab, Department of Surgery.

• Licensed and practiced mouse handling and technique, such as perfusion, to better understand arterial venous structure and function. Studied: Notch4\* and AVM, areas of strokes in the brain.

# Organic Chemistry Tutor (Jan - Nov 2018).

UC Berkeley.

• Hired by UC Berkeley Student Learning Center Science Department to tutor Organic Chemistry to undergraduate students.

## UC Irvine BioEngineering Intern (Jun - Aug 2017).

Lakey Lab, Department of Surgery.

- Researched the efficiency of capsules that protect pancreatic islets from immune rejection in diabetes.
- Skills developed: use of the Encapsulator, Immunohistochemistry Protocol with deparaffinization, rehydration, antigen revival, and immunostaining, TUNEL assay, microtome.

### OUTREACH

# BioEngineering Curriculum Committee (Aug 2017 - Present).

UC Berkeley.

• Collaborate with professors and advisors to write BioEngineering curriculum and courses for the major.

### Disabilities Student Note Taker (Aug 2016 - Present).

UC Berkeley.

• Hired by Physics, Computer Science, UpperDiv Ochem, BioE departments to take clear notes for disabled students.

# Society of Women Engineers Science Saturday Instructor (Aug 2018 - Present).

UC Berkeley.

• Teach engineering and science principles to middle schoolers on Saturdays. :)

### PUBLISHED

#### Basement Physics (Published May 2017).

Author.

• This book is available for purchase on Amazon.com and Amazon Europe.

# Visualizing Linear Algebra and Differential Equations (Published June 2017).

Author.

• This book is available for purchase on Amazon.com and Amazon Europe.

## **PROJECTS**

### The Kalman Kick (July 2018).

• Inspired by the Summer 2018 World Cup, this program interprets user input of player parameters, calculates discrete time predictions, and generates visual images of the soccer ball's future state on a penalty kick.

# Glaucoma Diagnosing Smart Contact Lenses (Nov 2018 - present).

• With another student designed circuitry and signal processing for wearable smart contact lenses monitoring anterior eye ROS species concentration for early stage glaucoma diagnosis.

### DABBLED AREAS & INTERESTS

Technical Writing. Python. HTML. JS. CSS. Autodesk/3D Printing. Drug Delivery. Soccer juggling. 1/2 Marathons.

909 539 5140