Santa Barbara, CA 925-202-1829 meganchang10@gmail.com

# Megan Chang

www.linkedin.com/in/megan-chang http://meganchang.life www.github.com/meganchang10

# **EDUCATION**

University of California, Santa Barbara - Mechanical Engineering, M.S. (GPA: 3.7) *June 2017* University of California, Santa Barbara - Mechanical Engineering, B.S. (GPA: 3.5) *June 2015* 

# **SKILLS**

• Computer: Matlab, Python, SQL, Java, Flask, SQLAlchemy, Solidworks, HTML, API

• Languages: English, Spanish

# **PROJECTS**

# HeyPal - www.heypal.fun

June 2017

- Completed Udacity Full Stack Nanodegree in order to learn how to execute my idea for a social network app that suggests fun activities in your local area
- Designed and built my vision for HeyPal using Python Flask web development, PSQL database queries, a Linux server host, and Google Maps and Foursquare APIs
- Integrated map feature with markers/ info windows to display a venue's website, phone, and photos

### **UCSB Master's Thesis** (available on my LinkedIn)

*April 2017* 

- Developed an efficient 1st order accurate MATLAB code to effectively simulate complicated dendritic crystal growth (the Stefan problem) on irregular domains
- Implemented the level-set method and Ghost-Fluid methods to achieve sharp interface tracking
- Used 3<sup>rd</sup> order extrapolation and Weighted Essentially Non-Oscillatory schemes to handle advection with higher order accuracy and reduced dispersive waves

#### **EXPERIENCE**

#### **UCSB Engineering Teaching Assistant,** Class Section Leader

*Jan 2016 – Jun 2017* 

- Created and delivered weekly lecture to section classes (20-25 students)
- Directed weekly office hours to provide extra one-on-one help to students

#### **Advanced Vision Science (AVS),** *Head Intern – Process Engineering*

*Jun 2014 – Oct 2014* 

- Led engineering studies to improve lens yield by over 10%, reduce operator time, and decrease costs
- Served as lead engineer during emergency production shut down and successfully brought lens yield back up and into production
- Served as engineering/operations liaison to improve productivity by influencing the work culture and bridging the gap between R&D, management, and operations

#### **UCSB Orientation,** Academic Advisor

*Mar 2014 - Aug 2014* 

- Orientated over 8,000 new students and their parents to UCSB
- Participated in panels for hundreds of parents, offered fun tours of campus/college town, and gave engaging safety and academic presentations to incoming students

# **HONORS**

- Won "Most Marketable" for Junior Design Project: table made of grids to be reconfigured (i.e. from square to L-shape) like Tetris for consumers in tight living spaces
- Received two **UCSB Technical Writing Excellence Awards** (one for "Dodonpa" Wikipedia article which receives 3,000 views monthly)
- President of Geek Week Committee (organized 2<sup>nd</sup> annual UCSB College of Engineering competition involving obstacle courses, scavenger hunt, kickball, etc.)