Rena Yang

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Education
University of California, Berkeley · *B.S. Bioengineering* · GPA 3.44/4.00 · Expected May 2022

Experience
Pennathur Lab, UCSB · *Research Assistant* · May 2019 — Current
Run fluorescence-based experiments revealing dynamic electrokinetic and electrochemical phenomena that occur near nanoconfined bipolar electrodes under an applied electric field, facilitating the development of a hybrid hydrodynamic-electrochemical peristaltic pump.

Fluid Energy Science Laboratory, UCSB · *Research Assistant* · June 2018 — August 2018
Assisted in data visualization and sample preparation, ran ground-based experiments for ISS experiment BCAT-CS quantifying cohesive sediment dynamics for advanced environmental modeling launched on SpaceX mission CRS-15.

Extra-curriculars
Innovative Design · *Graphic Designer* · February 2019 — Current
Provide pro-bono designs for flyers, banners, logos, and related graphic design work for student organizations and academic departments at UC Berkeley.

Gallery 113 · *Webmaster* · September 2017 — January 2019
Revised website design as a member of the SB Art Association, corresponded with Gallery 113 board members to update "Featured Artists" page monthly.

Dos Pueblos Engineering Academy · *Engineering Student* · August 2014 — June 2018
Developed working knowledge of Arduino, SolidWorks, and mechanical engineering techniques to complete 3 projects over the course of 3 years and contribute to the Robot Penguin Game and Spirograph as a senior.

Santa Barbara Music & Arts Conservatory · *Student Leader* · January 2017 — June 2018
Headed initiative to reboot SBMAC's official website. Redesigned visual assets, lead web development team, designed programs and promotional materials for events.

Dos Pueblos Engineering Academy · *Human Resources* · August 2016 — January 2017
Corresponded with student leaders, managed Google accounts, documents, and spreadsheets. Composed and sent out surveys to gauge student experiences.

Projects
Visual Novel Project · *Game Developer* · May 2019 — Current
Personal project done in collaboration with an illustrator from Pratt Institute. Developing an interactive story with the goal of publishing a completed game featuring 5 endings, 10 CGs, and 75,000+ words on Steam, App Store, and Google Play.

Trionfi Arcana · *Moderator* · May 2018 — Current
Manage an online art & narrative-centric world-building project between 45 people, create sophisticated spreadsheets, organize groupwide events.

Robot Penguin Game · *Project Leader* · December 2017 — June 2018
Designed a game to introduce younger demographics to programming concepts, created and lead a software development team, spearheaded visual development.

Spirograph · *Programmer* · August 2017 — June 2018
Used Python and Kivy to program a large-scale, automated spirograph. Designed an intuitive user interface, documented existing code.

Publications
Bipolar Electrodes for Microfluidic Pumping · *MicroTAS 2019 Conference* · October 2019
Coauthored an abstract explaining how microfluidic-based bipolar electrodes can be used to develop low volume fluid pumping mechanisms for wearable drug delivery.

Interests
Game Design, Creative Writing, Graphic Design & Illustration, Research, Traveling