

ANGEL HUANG

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EDUCATION

Massachusetts Institute of Technology , B.S. in Computer Science, Minor in Biomedical Engineering, 2021	Cambridge, MA
Taipei American School , High School Diploma, GPA 3.95/4.0, 2017	Taipei, Taiwan

WORK EXPERIENCE

Via Technologies: the biggest independent manufacturer of motherboards in the world	Taipei, Taiwan
<i>Software Engineering Intern</i>	June 2018-August 2018

- Developed a trigger word detection algorithm (i.e. “Okay, Google”) to improve speech processing pipeline and analysis with Keras and Tensorflow frameworks
- Implemented a speech gender-detection algorithm using Gaussian Mixture Models and improved accuracy from 50% to 97%
- Constructed an algorithm to change LED light colors on a microcontroller based on the audio signal frequency in C++
- Introduced machine learning into Via’s educational curriculum in China and the related hardware- and software- products

Massachusetts Institute of Technology Media Lab	Cambridge, MA
<i>Undergraduate Researcher</i>	January 2018-June 2018

- Investigated ways to apply Blockchain to improve the electronic medical record system in the U.S.
- Designed a Blockchain simulation that enables researchers to identify the program’s efficiency and security in real time

Massachusetts Institute of Technology Langer Lab	Cambridge, MA
<i>Undergraduate Researcher</i>	September 2017-June 2018

- Optimized the delivery of CRISPR/Cas9 into the in-vivo system by perfecting the process of nanoparticle formulation
- Formulated CRISPR/Cas9 nanoparticles for other labs to perform different experiments

Nazarbayev Intellectual Schools	Karaganda, Kazakhstan
<i>Biology Teacher and Curriculum Advisor</i>	December 2017 – January 2018

- Inspired 10th grade students to take control of their own learning process by holding laboratory design workshops
- Taught local Kazakhstan teachers to promote active and hands-on learning to prepare students for future education and career

Fu Jen University/National Taiwan University	New Taipei City, Taiwan
<i>Research Assistant and Physician Assistant</i>	June 2015-August 2017

- Collected/analyzed data to present the failure of current chemotherapeutic strategy for breast cancer and identified specific biomarkers to help improve chemotherapy
- Analyzed the cause of a diverse range of symptoms among Enterovirus71 infections and identified 4 mutations that causes brain death instead of being asymptotic

LEADERSHIP

MIT Hacking Medicine: <i>Operations Lead</i>	September 2017-Present
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- Organized the logistical needs for the 2018 April Grand Hack that attracted more than 500+ hackers
- Consulted for other organizations to help hold their own healthcare hackathons

Lean On Me: <i>Director of MIT Chapter</i>	September 2017-Present
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- Automated the application process of new chapters in universities across the U.S. to increase the efficiency of expansion
- Collaborated with the administrator to be mental health student advisor and create a stress relief space

FIRST Robotics Competition: <i>Team Captain</i>	December 2014-May 2017
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- Increased analysis efficiency by 110% and decreased human mathematical errors by developing an auto-analysis program
- Cold-called more than 60 high school administrators to promote robotics in Taiwan to improve its educational system
- Lobbied Taiwanese government to fund robotics curriculum and FIRST competitions; initiated meetings with 5 governors
- Created excitement around FIRST/robotics in Taiwan by being the 1st to introduce FIRST to the Taiwanese public/government

HONORS AND AWARDS

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| • 2017 Intel International Science & Engineering Fair 4th Award | • 2016 FIRST Dean’s List Finalist |
| • 2017 Certification in ACLS, NRP, ETTC, and EMT-1 | • 2016 MIT Network of Educators in Science and Technology |
| • 2016 Infectious Disease Society of Taiwan 1 st Place poster | • 2015 National Honor Society and Spanish Honor Society |

ADDITIONAL SKILLS AND INTERESTS

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- Fluent in Mandarin and English (First Language) • Proficient in Spanish (5 years) • Hike/explore • Tennis • Cooking
 - Technical Skills: Python (fluent), C/C++ (intermediate), Machine Learning (intermediate), Arduino (intermediate)