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CLAIRE HUANG

Seeking 2019 summer internship

education

Stanford University, June 2020 | Computer Science, 4.09

activities

University Rover Challenge, *robotic arm team*
Cardinal Ballet Company, *publicity and media*
Section Leader (TA) *for CS106 intro classes*

courses

CS 221, Artificial Intelligence
CS 131, Computer Vision
AA 274, Principles of Robotic Autonomy
ME 210, Mechatronics
CS 110, Computer Systems *(in progress)*

experience

Ground Segment Controls and Automation Intern, **SpaceX**
06.2018 - 09.2018

- Wired and coded Raspberry Pi interface to control 40-year-old undocumented RF antenna
- Developed drone system to mimic vehicle telemetry for optical tracking tests
- Debugged PID controllers, IMU filtering; built enclosures, Rasp Pi remote camera trigger

Software Engineering Intern, **TalkingPoints**
06.2017 - 09.2017

- Built translation crowdsourcing web and mobile app with Meteor, React, MongoDB, Cordova
- Handled 20 translators, 3000+ messages through the app in six weeks

Team Captain, **FIRST Robotics Team 1700**
06.2015 - 05.2016

- Managed 30 members of all-girls robotics team to build 120-pound robot in six weeks
- Programmed robot's omnidirectional, low jerk drivetrain, PID controlled ball shooter

projects

Engineer, **Stanford University Rover Challenge**
09.2017 - present

- Designed and built 6-DOF robotic arm capable of reaching 1.5m, lifting 5kg, using tools
- Modeled and simulated in CAD, spec-ed gears and pulleys, manufactured 3-DOF wrist

Software and Electrical Engineer, **Lila**
05.2018 - 06.2018

- Designed IoT tile matching game for Alzheimer's patients to track cognition with dignity
- Designed PCB in Eagle, wrote software for tile tracking, e-ink display, web dashboard

Engineer, **self-balancing robot**
06.2014 - 07.2014

- Assembled, wired, and programmed remote-controlled, mini segway robot
- Worked with Arduino Due, six-DOF IMU; wrote custom nested PID controllers for balancing

skills

software

proficient in:
C++, Python
Arduino
Meteor JS, React
Git, Linux

experience with:
Java, C
ROS, OpenCV

hardware

Raspberry Pi, Arduino
Adafruit Feather
IMUs, GPS
3D printer, laser cutter
drill press, bandsaw

other technical

Solidworks, Autodesk Fusion
Sketch (graphic design)
Final Cut Pro X (video)
Keynote (slide decks)

awards

Stanford CS+Social Good
Fellow

National Merit Scholarship

NCWIT Aspirations in
Computing, winner

FIRST Engineering
Inspiration Award

hobbies

ballet, contemporary
tinkering
dried fruit
whistling