

Frances Tso

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EDUCATION

Carnegie Mellon University

2013 - 2017 (expected)
B.S. Computer Science
B.S. Economics
GPA: 3.33/4.0

SKILLS

Programming

Python, Java, HTML, Javascript, SQL,
PHP, C++, C, SML, Assembly,
jQuery, CSS

Software

Solidworks, Photoshop, Unity, Unreal,
Audacity, Android

Hardware

Arduino, Robotis CM9.04C, Dynamixel
motors, Oculus Rift, Myo

Languages

English(Fluent), Cantonese(Fluent),
Mandarin(Fluent), Spanish(Reading)

HOBBIES/AWARDS

- 1st Place Women's Billiards,
Nationals Qualifier (2015)
- 2nd Place UM Team Pool
Championships (2015)
- Carnegie Mellon Dean's List (2015)
- Alaska State Representative at
MTNA Violin Competitions (2013)

PROJECTS

- Virtual reality picture museum
with Oculus Rift
- Billiards simulation using
OpenGL, event-based physics, and
Euler methods
- Virtual machine for C0, a C based
language.

WORK EXPERIENCE

Bossa Nova Robotics

06/2016 - Present

Software Development Intern - Pittsburgh, PA

- Allowed users to freely structure their queries by creating generic SQL query processing for efficient data management.
- Extended the Katharsis library to support JSON Web Tokens and LDAP authentication for data security.

NASA Ames Research Center

05/2015 - 08/2015

Software Development Intern - Mountain View, CA

- Built web app as a full stack developer to preserve NASA research data and to facilitate collaboration between ~200 researchers.
- Utilized Human-Computer Interaction principles to improve intuitiveness for the on-boarding process.

Robotics Institute

08/2015 - 05/2016

Undergraduate Research Assistant - Pittsburgh, PA

- Designed 3D-printed 4- and 5- legged robots using Solidworks under Dr. Stelian Coros; presented on Bell Media, Canada.

Center for Victims (CV)

01/2015 - 05/2015

Volunteer Software Developer - Pittsburgh, PA

- Led CMU design team to develop Android app that notifies crime victims of their offenders' statuses, decreasing alert time by 1 hour.
- Created web app that allow CV employees to search/update crime info, replacing the original time-consuming paperwork system.

LEADERSHIP EXPERIENCE

CMU Solar Racing

12/2014 - Present

Vice President - Pittsburgh, PA

- Led 4 design teams totalling 30 members in constructing 20 ft solar boats. Received Most Improved Team award in 2014 Solar Splash Championships.
- Managed organization finances of over \$30K and generated \$5,500 through grant applications and fund-raisers.

Scotty Labs

08/2014 - 08/2015

Tech Assistant - Pittsburgh, PA

- Handled the sponsorship packet and event logistics with 12 students to organize TartanHacks, the largest hackathon at CMU with over 350 participants.