Nelson Liu

nelson@nelsonliu.me
nelsonliu.me
linkedin.com/in/nelsonliu1
github.com/nelson-liu

TECHNICAL SKILLS

PROGRAMMING LANGUAGES
Java•Python•Javascript•Scheme
FRAMEWORKS / STACKS
Flask•LAMP Stack
FRONT-END DEVELOPMENT
HTML5•CSS3•Javascript,JQuery•AJAX
TOOLS / UTILITIES
BASH•Git•SVN•GNU EMACS

EDUCATION

University of Washington, Seattle
Seattle, WA
Attended from 2015 – 2019 (Projected)
TROY HIGH SCHOOL
Fullerton, CA
Attended from 2011 – 2015 (Projected)

COURSEWORK

TROY HIGH SCHOOL
Advanced Placement Courses
Computer Science • English • US History • Physics B • Calculus AB/ BC • Economics • Government • Literature

ACHIEVEMENTS

2015 – First Place, Dave Wittry Memorial Programming Competition
2015 – First Place, California State Los Angeles ProgFest
2015 – Top 30 of 300+ projects, PennApps Winter 2015
2014 – Top 20 out of 120+ projects, HackPrinceton Fall 2014
2014 – Winner, Improving MIT Award, MIT BitComp 2014
2014 – National Merit Commended Scholar
2014 – First Place, Science Olympiad National Tournament • Member of Troy High Science Olympiad Team
2013 – Part One / Part Two Winner, IBM Master the Mainframe Competition
2013 – Second Place, Dave Wittry Memorial Programming Competition
2013 – Second Place, California State Los Angeles ProgFest

EXPERIENCE

MIT CSAIL INFOLAB GROUP | Research Assistant
June 2013 – September 2014 | Cambridge, MA

- Worked with the START Natural Language Processing System and its backend, Omnibase.
- Wrote Scheme scripts to dynamically extract JPL and U.S. Election Atlas data for use in Omnibase.

UCSB BREN KELLER LAB | Research Assistant
June 2014 – July 2014 | Santa Barbara, CA

- Developed models to predict and model hydraulic fracture propagation in porous shale formations.

SOFTWARE PROJECTS

BITSTATION | Winner of MIT Bitcomp Improving MIT Award
Summer 2014 | An online Bitcoin wallet for MIT Students

- Features certificate login, address books, and transaction annotation to promote peer-to-peer transactions among MIT students.
- Developed with Ruby on Rails in the span of 1 month.

MYODRONE | Top 30 / 300+ projects, PennApps Winter 2015
January 2015 | An intuitive method of wearable drone control.

- Team lead role with focus on back-end development.
- Used the Thalmic Labs Myo armband and arm gestures to control a Parrot Drone with 8 degrees of movement.

FALANGAFONE | Top 20/120+ projects, HackPrinceton Fall 2014
November 2014 | An gesture-controlled music editing tool.

- Used the Leap Motion to enable live editing of .mp3 and other sound files via finger and hand gestures.
- Developed a Flask backend as well as a web front-end for the application, used the Pyo library to modify music on the fly.

HARDWARE PROJECTS

OMNITUENS | Currently in development
In progress | A CV powered malaria diagnosis tool.

- Uses the Raspberry Pi, an onboard camera, and computer vision to perform malaria cell counts on blood smears.