

Ryan Siu

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EDUCATION

UNIVERSITY OF MICHIGAN

BS IN COMPUTER SCIENCE

September 2018 – December 2021

Ann Arbor, MI

University Honors

GPA: 3.9 / 4.0

STUYVESANT HIGH SCHOOL

June 2018 | New York, NY

Stuyvesant Honor Society

GPA: 95.7 / 100

COURSEWORK

UNDERGRADUATE

Data Structures and Algorithms

Intro Programming and Data Structures

Discrete Math

Entrepreneurial Design: IoT

Multivariable Calculus

Linear Algebra

HIGH SCHOOL

AP Computer Science

Data Structures and Algorithms

Software Development

Systems Level Programming

Computer Graphics

SKILLS

LANGUAGES

Proficient:

Python • C • C++ • Java

Familiar:

Javascript • Matlab • \LaTeX

SOFTWARE DEVELOPMENT

Proficient:

HTML5 • CSS3 • React.js • Flask

SQL • Git • Android • Terminal

Ubuntu • Arduino • Raspberry Pi

Familiar:

Angular • DigitalOcean

ACCOMPLISHMENTS

2019 Halite III Silver Tier

2018 National Merit Scholar

2017 FTC NYC Regionals Winners
(FIRST Tech Challenge: Stuy Fission 310)

2016 FTC NYC Regionals Winners

EXPERIENCE

GRADEGUIDE (THE MICHIGAN DAILY) | SENIOR SOFTWARE DEVELOPER

September 2018 – Present | Ann Arbor, MI

- Wrote Python scripts to add U-M course data into a SQL database, which was used by front-end engineers to display on the website (gradeguide.com)
- Replaced all client-side calculations with a server-side Python script to precalculate course metrics, improving page load times

MORGAN STANLEY | BUSINESS ANALYST INTERN

July 2018 – August 2018 | New York, NY

- Redesigned an obsolete web application UI with Angular and Material Design to handle review of segregation of duties (SoD) inside the firm, allowing reviewers to more intuitively navigate the UI

HORIZONS SUMMER SCHOOL | ELECTRONICS CLASS TEACHER

July 2017 – August 2017 | Brooklyn, NY

- Founded course and designed four-week curriculum to introduce a class of 7 middle schoolers to STEM
- Taught about Arduino, basic electronic components, and programming in C++ with project-based lessons
- Guided students through final projects (such as a music player and a Simon Says game) and organized a showcase with presentations for the best projects
- At least one student continued to pursue electronics in high school, joining a FIRST Robotics Competition team

ACTIVITIES

STUYVESANT HONOR SOCIETY | VP OF WEB DEVELOPMENT

June 2016 – May 2018 | New York, NY

- Developed new features, such as online essay editing, for the organization's website; online essay editing was implemented using Google Drive API and OAuth, and allowed tutors to make comments on submitted essays
- Assigned tasks to 10-person committee to maintain and update the website
- Coordinated Parent Teacher Conferences by assigning 300 volunteers to teachers based on student/teacher requests. Implemented a variation of the stable marriage algorithm as a Python script.

PROJECTS

CHRON-X October 2018 – December 2018

- github.com/siuryan/watch
- medium.com/@ryansiu/how-to-make-your-own-smartwatch-35ff8306c160

DIY smartwatch built using an Arduino, with an operating system coded in C++. Can receive notifications from phone after connecting to the Android app via Bluetooth.

SIMPLICITY May 2017 – June 2017

- github.com/siuryan/Simplicity

Simulation game where player manages an airline company. Wrote and designed GUI and GUI components from scratch using an object-oriented design, also handling user input. Ensured that MVP was completed on time by planning the project timeline and actively communicating with partners.