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 • LaTeX

SOFTWARE DEVELOPMENT
Proficient:
HTML5 • CSS3 • React.js • Flask
SQL • Git • Android • Terminal
Ubuntu • Arduino • Raspberry Pi
Familiar:
d3.js • DigitalOcean • Agile (JIRA)

ACCOMPLISHMENTS

2019   Halite III Silver Tier *(#838/4014)*
2018   National Merit Scholar
2017   FTC NYC Regionals Winners
       (FIRST Tech Challenge: Stuy Fission 310)
2016   FTC NYC Regionals Winners

EXPERIENCE

UNIVERSITY OF MICHIGAN ITS | Software Developer
February 2019 – Present | Ann Arbor, MI
- Developed an object-oriented application using the DTO/DAO design structure in Python3 to generate spreadsheets for the U-M Office of Budget & Planning to project and determine student tuition
- Retreived, formatted, and used data from Kuali APIs in spreadsheet formulas. Results were then passed to Google Sheets API to create a spreadsheet.
- Worked with senior developer and project lead, under Agile project management using JIRA and Kanban

GRADEGUIDE (THE MICHIGAN DAILY) | Senior Developer
September 2018 – Present | Ann Arbor, MI
- Delgated tasks to team of 5 members to develop gradeguide.com
- 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
- 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 project-based curriculum to introduce a class of 7 middle schoolers to STEM
- Taught about Arduino, basic electronic components, and programming in C++
- 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

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.