Shawn Aviles

Lodi, NJ | saviles@stevens.edu |+1-201-566-7529 |linkedin.com/in/shawn-aviles | github.com/ShawnAviles| shawnaviles.com

Education

Stevens Institute of Technology, Hoboken, NJ

***B.Eng** in Computer Engineering, **Conc.** in Software Engineering & Design* Expected December 2024

GPA: 4.00/4 | **Awards:** Edwins A. Stevens Scholarship, Stevens Grant, Kenneth W. Freeman Scholarship, Dean's List

Courses: Intro to Programming and Algorithmic Thinking, Data Structures and Algorithms, Differential Equations, Discrete Mathematics, Intro to Engineering Design and Systems Thinking I II & III, Entrepreneurial Thinking, Microprocessor Systems

Extracurriculars: *President* of the Men's Volleyball Club, *Vice President* of Coffee Club

Work Experience

Software Developer Intern | Remote

Stevens Institute of Technology May 2022 - November 2022

- Worked for Prof. Alex Wellerstein to create a pdf annotation desktop application for macOS & windows using **ElectronJS**
- Developed browser feature to traverse, search, filter, & update local file system storage using **jQuery**, **NodeJS**, & **Bootstrap**
- Created feature allowing data fields to be indexed to improve user experience, querying speed, and extensibility
- Deployed **PHP** Server to sync & update JSON files containing 1500+ annotations across all instances of the application

Coding Instructor | Remote

Varsity Tutors December 2021 - August 2022

- Collaborated with students and parents to determine student needs to develop individual lesson plans
- Taught 15+ college students fundamentals of different programming languages like **C++**, **Python**, and **Java**
- Prepared teaching materials & training modules for students to consolidate and convey new information effectively

Code Sensei | Midland Park, NJ

Code Ninjas June 2019 - April 2020

- Taught 50+ children 3D-Modeling, game development, and coding in **JavaScript**, **Scratch**, **Lua**, and **Python**
- Conducted one-on-one and group sessions for students teaching via curriculum-based learning

Projects

Sticky Notions | Personal Project February 2022 - June 2022

- Developed and tested Sticky Note Web Application to sync quick notes to Notion database to increase productivity
- Deployed as Google Chrome Extension allowing users to utilize Notion without hindering cpu usage
- Used **ReactJS** and **Bootstrap** to create frontend with an **ExpressJS** middleware to handle Notion API Requests

IoT Robot | Academic Project January 2022 - May 2022

- Created IoT Robot to analyze its surroundings and traverse an obstacle course in less than 2 minutes with no collisions
- Programmed, modeled, and wired IoT device using **Arduino** & **Solidworks** to read LiDAR & ultrasonic data

Research

AI Researcher | Hoboken, NJ

Stevens Institute of Technology January 2022 - September 2022

- Created Neural Network using **TensorFlow** to analyze and predict distance of trees from a given photo for forest mapping
- Tested three iterations of Convolutional Neural Network with differing layers to achieve accuracy of 80%
- Developed **Python** Image Parser to automate image processing of custom dataset to increase network efficiency

Skills & Certifications

Languages: JavaScript, Python, C++, HTML, CSS, PHP, Java

Technologies: ReactJS, ElectronJS, NodeJS, jQuery, Bootstrap, MongoDB

Software: Git, Unity, SolidWorks, Arduino, KiCAD, AutoCAD

Certifications: AWS Fundamentals & DevOps (Coursera), NOCTI Workforce Competency