#### **Education:**

Rowan University, Glassboro, NJ; Class of 2022 Graduate, GPA: 3.91/4.00; Summa Cum Laude

• Bachelor of Science -

#### **Electrical and Computer Engineering**

- Minor Computer Science
- '20 '21 President of Upsilon Pi Epsilon, CS Honors Society, Rowan Chapter
- · Honors Program; Tau Beta Pi Engineering Society

## Experience with:

- Algorithm Development, Data Structures
- Embedded Systems
- Verilog HDL, ModelSim
- Cadence Virtuoso
- C++
- C#
- Python
- Front & Backend Web Application Development
- Amazon Web Services, Cloud Computing
- Software Specifications and Documentation
- Object Oriented Programming and Design
- Knowledge of Functional Programming Paradigm
- Public Speaking, Product Demos, Tech. Writing
- Linux; Oracle VM Box
- · Java, as well as Java Spring Boot
- JavaScript, TypeScript
- Node.js, Express.js, React.js, Redux
- RESTful API; Insomnia, Postman
- Angular
- HTML5 and CSS
- · MySQL database
- MongoDB
- · Visual Basic: worked in Visual Studio
- · Git; GitLab, GitHub, Bitbucket
- CI/CD Pipeline, Automated Builds
- Test-Driven Development (L1, L2, Regression)
- Unit testing (work in xUnit)
- JIRA/Communication/Teamwork/Agile/Scrum
- Scikit-learn
- Kali Linux (for Penetration Testing)
- Unity Game Engine
- MATLAB
- Bi-Literacy in the Italian Language

# **Completed Coursework:**

- Honors Data Structures and Algorithms
- Honors Design and Analysis of Algorithms
- Computer Architecture
- Very Large Scale Integration
- Electronics
- Honors O.O. Programming/Data Abstraction
- Foundations of Computer Science
- Principles of Biomedical Systems and Devices
- Advanced Cybersecurity (Graduate Level)
- Digital Signal Processing, Signals and Systems
- Intro. to IOT (Graduate Level)
- Intro. to Digital Systems, Electrical Circuit Analysis, Intro. to Embedded Systems, Engineering Electromagnetics, Intro. to Systems and Control

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## **Objective**

Motivated to add value. Ready to apply work ethic to software and/or hardware purposes with team members in a collaborative environment, and manage different projects /responsibilities/goals at any given time. Will present/public speak in product demos.

# **Employment/Volunteerism**

#### Software Engineer Co-op, Lockheed Martin May '20 – Sept. '20; May '21 – Jan '22

- Updated legacy code and developed new features, wrote and performed tests (for level 1 and level 2/regression testing)
- Scrum, Agile framework; member of highly collaborative, DevOps driven team; carried out product demos to public speak/present before 40 other engineers/managers

#### **Computer Science Tutor**

Fall 2019, Fall 2020, Spring 2021

- Included assisting a Fall 2019 class of 16 students in Intro. to O.O. Programming
- Realized passion for teaching and helping fellow colleagues

### Resident Assistant, Rowan University, Glassboro, NJ

2019-2020

- Oversaw floor of 22 residents. Enforced policy. On duty with another resident assistant approximately 4 times per month for the entire building of about 350 freshmen.
- On call during night 2-3 times a month. Resolved lockouts. Wrote incident reports and duty logs. Performed health and safety inspections. Provided resources to students.
- On team with strong family vibe: taught importance of working together

#### Maintenance, St. Joan of Arc School and Church, Marlton, NJ

**Summer 2018** 

### Volunteer Service, Virtua Marlton Hospital, Marlton, NJ

2018

Volunteered in the surgical waiting room by assisting families of patients waiting for information. Maintained confidential paperwork regarding the status of patients.

# **Programming Project Experience**

### **Development of Cloud Applications and Website**

- Developing personal website using Node.js and React.js; deployed using AWS
- Includes custom-built "My Dashboard" App (Java Spring and Angular)
- Also includes work-in-progress custom-built "BioLab" App (React, Redux, Express) (in the personal website's monorepo) (link to personal website is at top of Resume)
- Specifies RESTful API to connect to MySQL database (AWS RDS)
- Code repositories accessible on GitHub (link at top of Resume)
- Personal site will store knowledge/original notes learned during college (ex, electronics theory), as well as other side projects: for knowledge retention as well as for education
- Will include interactive visual diagrams currently being built with JS, HTML, and CSS

#### **Development of Hospital-based Medical Software System**

Currently on team with Rowan University in assisting the growth of an iOS/Android platform, to integrate to a Node backend & React web frontend for medical personnel.

#### Research of Efficiency of Ensemble Models for ICU Mortality Prediction

- Analyzed efficiency of hyperparameter-tuned Scikit-learn Machine Learning models in predicting 24-hour patient survival in ICU. Part of team at Rowan University.
- Experience with Big Data; utilized Data Imputation, SMOTE, Grid Search, Numpy, Pandas, Confidence Intervals, ROC AUC scoring, K-Fold Cross Validation
- Investigated Bagging, Boosting, Gradient Boosting, and Random Forest classifiers. Wrote scripts in the Python programming language, ran jobs on Linux server.

#### Web Game

Started developing a 2D game in JavaScript. Learned through self-study and through online learning. Created quick open-source boiler plate code template for a 2D web game, which is available on GitHub (link at top of Resume).