

## 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
- FPGA, 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 collaborative environments, and manage different projects/responsibilities/goals at any given time. Will present/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; conducted 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 “**MyDashboard**” App (Java Spring and Angular) and “**BioLab**” App (React, Redux, Express) (in website’s monorepo) (link to personal website is at top of Resume).
- Uses AWS Elastic Load Balancers for HTTPS configuration.
- 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 tools such as Data Imputation, SMOTE, Grid Search, Numpy, Pandas, Confidence Intervals, ROC AUC, 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).