Matthew Joseph Bisicchia

www.matthewbisicchia.com | matthewbisicchia@gmail.com | 856-834-0096

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:

- Object Oriented Programming and Design
- Algorithm Development, Data Structures
- Knowledge of Functional Programming Paradigm
- Website/Application Development
- Public Speaking, Product Demos
- Amazon Web Services
- C++
- Java
- Spring Boot
- C#
- JavaScript
- TypeScript
- Node.js
- Express.js
- RESTful API; Insomnia, Postman
- React.js
- Redux
- Angular
- HTML5 and CSS
- MySQL database
- MongoDB
- Python
- Visual Basic
- Linux; Oracle VM Box
- Git; GitLab, GitHub, Bitbucket
- CI/CD Pipeline
- 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
- Verilog HDL
- Cadence Virtuoso
- Bi-Literacy in the Italian Language

Completed Coursework:

- Honors Data Structures and Algorithms
- Honors Design and Analysis of Algorithms
- 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)
- Computer Architecture, Electronics, Intro. to Digital Systems, Electrical Circuit Analysis, Intro. to Embedded Systems, Engineering Electromagnetics, Intro. to Systems and Control

Objective

Motivated to apply work ethic to serve software and/or hardware purposes with team members in a collaborative environment, and present/public speak on demos. Greatly interested in biomedical engineering. Also interested in financial sector, especially the stock market (looking to get involved in stock investments).

Employment/Volunteerism

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

- Updated legacy code and developed new features (C++), wrote and performed tests (for level 1 and level 2 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 February 2022 – Present

- Developing personal website using Node.js and React.js; deployed using AWS
- Includes custom-built **"My Dashboard" App** (Java Spring and Angular). The functionality within the app is essentially a placeholder, however the overall full stack deployment was the main development learning experience.
- Also includes work-in-progress custom-built **"BioLab" App** (React, Redux, Express) (development started in May 2022 and resides within the personal website's monorepo)
- Both specify RESTful APIs to connect to MySQL databases (AWS RDS)
- Projects and code repositories accessible at Projects tab at www.matthewbisicchia.com
- 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 February 2022 – Present

- 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 Spring '21

- Participated in research team to analyze efficiency of hyperparameter-tuned Scikit-learn Machine Learning models in predicting 24-hour patient survival in ICU.

Web Game May 2020

- Started developing a 2D game in JavaScript. Learned through self-study with online resources and through networking with talented individuals met at college.
- Made a quick open-source boiler plate code template, available at: https://github.com/MatthewBisicchia/TwoDVideoGameTemplate.git