Evangelos Barous

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Education

Northeastern University, Boston, MA **May 2025**
Bachelor of Science majoring in Electrical Engineering, Computer Engineering with Robotics Minor (GPA 3.56)

Technical Skills

Electronics: Arduino | basic circuit design | soldering | oscilloscopes | digital multimeter | function generators
Programming: C++ | C# | Python | Java | MATLAB | Simulink | SystemVerilog | Git | Bash | MEEP
Software: AutoCAD | SOLIDWORKS | PSpice | Linux OS | Autodesk Inventor | Fusion360 | Tinkercad | Multisim | Atlassian Bamboo | Visual Studio | Conan | Docker | CI/CD | Ubuntu | Unit Testing
Languages: Fluent in Greek, Working knowledge Spanish

Work Experience

MORSE Inc., Boston, MA **July – December 2024**
Embedded Engineer

- Added backend and frontend functionality for a screen that allows for new methods and improvements for setting the release point
- Translated a C++ and Python repository into a C# equivalent for configuring a new radio and ground station for testing

Collins Aerospace, Cedar Rapids, IA **June – December 2023**
Software Engineering Co-op (Worked on DoD project with Secret level clearance)

- Created testing and user interfaces for the datalink portion of the TCTSII and CRIIS air combat training systems using Java, Python, C++, Linux, Docket, and Git
- Created a new repository containing unique Conan package, virtual environment setup and specifications for Bamboo build testing
- Created a new test suite for TCTSII subsystems that uncovered inefficiencies in those subsystems
- Added functionality permitting more efficient identification of potential message drops systemwide
- Worked under an AGILE system

Scientific Systems Corporation Inc., Woburn, MA **July – December 2022**
Autonomous Systems Engineer (Worked on DoD project)

- Parsed through csv files to generate figures and calculate integrals of simulations with Python
- Parsed through json files to create files used to generate new simulations with Python
- Created module that generates particle models and uses kernel density estimations to generate future location points on a map for other modules' use in C++

NEU, Undergraduate Research Assistant II, Boston, MA **April – Present**

- Determine intensity peak by examining txt file data and creating graphs of the matrix data
- Create a Python script file that parsed through, plotted the intensities of each trial and graphed all peaks of each txt file
- Determine nanobeam cavity's light storage by sending light waves through a nanobeam using computer simulations and scripts and gathering results under guidance of Dr. Xufeng Zhang

NEU, Undergraduate Research Assistant, Boston, MA **September – December 2021**

- Examined throughput and goodput data from a 60 GHz router, using Linux OS scripts, to evaluate 60 GHz phone sectors
- Performed router experiments to measure the throughput and goodput data for each sector of a 60 GHz phone
- Contributed to the design of a 5G and 6G millimeter wave networking research project under guidance of Dr. Dimitrios Koutsonikolas to create "An Open, Programmable Platform to Conquer the 5G and 6g Wireless Spectrum"

Engineering Projects

Biomedical Signal Amplifier **November 2021**

- Used instrumental and operational amplifiers to create an EKG
- Used A/D conversion to feed signal into a MATLAB program

"Archetype" Keyboard **November 2021**

- Used 3D printing, Arduino, and soldering to create a specialized keyboard for patients with arthritis

Codebreakers **May 2021**

- Created a variation of the game Mastermind using Arduino and basic circuit design
- Used potentiometers and push buttons to create a user interface with the computer