Michael Dasaro

Boston, MA | michaelgdasaro@gmail.com | github.com/Michael73MGD

EDUCATION:

Stevens Institute of Technology, Hoboken, NJ

-Masters of Engineering in Electrical Engineering – Robotics and Automation Systems — May 2024

-Bachelors of Engineering in Computer Engineering | GPA: 3.943 — May 2022

Coursework | Autonomous Mobile Robots, Control Theory, Linear Algebra, Modeling and Optimization, Image Processing, Digital System Design, Data Structures & Algorithms, Microprocessor Systems, Computer Architecture

SKILLS:

AI:

Locally-run Llama2 API integration, GPU-accelerated Machine Learning, TensorFlow / PyTorch Configuration

Programming Languages:

Python MATLAB JavaScript/HTML Java C++ SQL ARM Assembly

Software:

AutoCAD Inventor Fusion 360 SolidWorks 3D Printing Linux Windows

ROS Git Virtual Box Visual Studio Photoshop Excel Vivado

EMPLOYMENT:

MITRE | *Autonomous Systems Engineer* — *2022-*

- Developed an intelligent Dashboard using Shiny for Python that enables Army Test and Evaluation Command to display, organize, and edit large datasets. Features include interactive maps and generative AI suggestions.
- Modified, implemented, and retrained GPU-accelerated machine-learning from Convolutional Cross-View Pose Estimation (CCVPE) for use on offroad ground vehicles with the Rellis3D dataset.
- Researched and implemented deep learning neural networks for semantic segmentation of LIDAR point clouds to advance autonomous technology for offroad ground vehicles using Python and ROS.

Herrick Technology Laboratories | *Electrical Engineering Intern* — *2021*

Developed encrypted removable memory modules and tools for reusing hardware with classified information on software-defined radios.

Valley Bank | *Application Development Co-op Student* — *2020*

Developed several internal projects including .NET web-apps, PowerApps, and data manipulation tools. Software is used daily for logging and automated data manipulation.

IEEE Historical Society Intern: Created research articles and assisted with exhibits. — *2019*

OasisVRX: Assisted the startup company with hardware and software setup for Virtual Reality experiences. — *2019*

INDEPENDENT PROJECTS:

Light-Blue: Winner of HackRU Spring 2021 Maverick Track: Built and programmed a chess-playing robot on the frame of a 3D printer with a claw, webUI, and computer vision for recognizing game states.

Boost: Winner of HackRU Fall 2020 Maverick Track: A 2D racing game complete with a map creation tool and evolutionary neural network that learns to race around any track using the Python NEAT library.

Rutgers Class Mapper: Developed at HackRU Fall 2019, Class Mapper routes your weekly schedule around campus, accounting for bus routes and walking directions, displayed with Google maps API.

Inquiry: Developed at PennApps XVIII to enable students to communicate with and assist each other efficiently on schoolwork. The app has unique features such as a whiteboard and Q&A section.