# **MUTASIM CHOWDHURY**

972-804-0955 | mutasimac@gmail.com | github.com/machowdh

#### **EDUCATION**

# **Georgia Institute of Technology**

Master of Science in Computer Science, GPA: 3.83

#### **University of Texas at Dallas**

Bachelor of Science in Computer Engineering, GPA: 3.4

Atlanta, GA

Aug. 2020 – Spring 2024

Richardson, TX

Aug. 2016 – May 2020

#### **EXPERIENCE**

**Gusto** May 2022 – August 2022

Software Engineer Intern

San Francisco, CA

- Implemented asynchronous APIs within the Rails framework leveraging Sidekiq to provision demo companies and expedite partner developer API testing
- Utilized React and TypeScript to enhance the Developer Portal front-end and optimizing API data visualization and user interaction
- Led a documentation driven development effort to specify Embedded Payroll API requirements by meeting with partner companies
- Managed project deliverable timelines to ensure the full release of Developer Portal minimum viable product

ARGO Data May 2019 – August 2019

Software Engineer Intern

Richardson, TX

- Assisted in full removal of product dependencies on Internet Explorer to bolster security for financial institutions using ARGO in 100 million daily transactions
- · Refactored Teller Payments software to utilize modern asynchronous JavaScript paradigms
- Updated UI/UX look-and-feel to ensure responsive design and consistent branding across ARGO applications
- Utilized JIRA user stories to triage incoming defects from QA and testing teams and participated in regular Scrum meetings and sprint reviews

#### **PROJECTS**

# **q3p LLC** | A consulting company built to bolster and build online communities

- Collaborated with renowned music and gaming entities as a proactive consulting agency.
- Orchestrated strategic initiatives to drive fan base expansion, interaction, and seamless onboarding for clients
- Spearheaded the creation and upkeep of Discord bots using Python catering to over 500k daily active users

#### **I.R.I.S.** | *Python, C, NVIDIA Jetson, Omnipresense*

- Intelligent Radar Implemented System for Crosswalk Navigation
- Blueprinted a holistic system built upon radar, haptic feedback and computer vision to assist pedestrian crossing for those with visual impairments to be used on real crosswalks and traffic intersections
- Implemented TensorRT optimized YoloV3 for pedestrian detection with 99% accuracy within 20 meters of the device
- Designed conditional GPIO signal toggling on the Jetson TX2 SoM to inform vehicles about pedestrian presence or lack thereof using LEDs and maintain safe traffic flow

## AI Robotics | Python

• Projects exploring facets of autonomous robotics including control, inference, SLAM, and Kalman/Particle filters in NumPy and native Python.

# **TECHNICAL SKILLS**

Languages: Python, Ruby, TypeScript, JavaScript, C#, C/C++, SQL, HTML/CSS

**Libraries & Frameworks**: Rails, Sorbet, React, Django, Sidekiq, pandas, numpy, TensorFlow, PyTorch, scikit-learn, spaCy, NVIDIA JETSON, OpenCV

**Developer Tools:** Git, Docker, GitHub, SourceTree, Bitbucket, JIRA, VS Code, Figma, Unity