# RAMSEY DAOU

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#### **SUMMARY**

Software engineer with experience – tailor to job.

#### **TECHNICAL SKILLS**

Programming Languages:
C, C++, C#, Python, MATLAB

Software Development Tools: Visual Studios, Azure DevOps, Perforce, GitHub, Unity

#### **WORK EXPERIENCE**

### **SOFTWARE ENGINEER, R&D**

Sept 2019 – Present

National Instruments, Austin, TX

- Contribute to a large codebase of 1+ million lines, focusing on readability and reusability.
- Define, estimate, and task out user stories, assigning their priority and significance to overall feature.
- Develop code in an Agile environment with a focus on customer feedback and meeting deadlines.
- Programmed 25+ Google unit tests to cover new and existing code with 95% code coverage.
- Took ownership of 4 user stories, fixed several bugs, and completed 48-hour C++ training course.

#### **TEACHING ASSISTANT, 'COMPUTING FOR ENGINEERS'**

Aug 2017 – May 2018

University of Houston, Main Campus

- Worked with professors to create an Arduino-based 'Simon Says' game using MATLAB to introduce freshman students to key concepts of electrical engineering.
- Organized 'Cram Session' for 50+ freshmen students, providing a place to study for finals and volunteers to ask for help.

### **EDUCATION**

The University of Houston May 2019

Bachelor of Science Degree in Computer Engineering GPA: 3.9

Relevant Courses: Data Structures, Fundamentals of Artificial Intelligence, Intro to Machine Learning

# **PROJECTS**

# **Construct Project**

Sept 2019 – Present

- Designed and developed a turn-based strategy game that implements reinforcement learning and Neural Networks to train Al opponents, using Unity Machine Learning Agents and TensorFlow.
- Implemented Perlin Noise to generate a randomized grid world and utilized Dijkstra's algorithm to find shortest movement path.

#### **Mobile Robotic Videographer**

Aug 2018 – April 2019

- Collaborated with 3 peers to design a prototype wheeled robot capable of tracking and filming a runner safely at speeds up to 15 miles per hour for 60+ minutes as part of a \$600,000 research grant.
- Implemented machine learning to detect a runner within the video frame and estimate their distance.
- Designed a control system to track the runner and navigate through GPS waypoints using Python.
- Finished 2<sup>nd</sup> out of 16 teams for completing the project and delivering a clear & engaging presentation.

#### **NASA Community College Aerospace Scholars**

Jan 2017 – Apr 2017

- Cooperated with 10 scholars to build a model rover, taking role of Lead Software Engineer.
- Presented and pitched rover design to 6 NASA employees, focusing on flexible and reliable design.