

# GABRIEL MALLARI

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## Education

### University of Virginia

Aug 2018 – May 2022

B.S. Computer Engineering, GPA: 3.8/4.0

Charlottesville, VA

Coursework: Algorithms, Computer Architecture, Software Development, Program and Data Representation

## Experience

### Software Engineer Intern

Jun 2021 – Aug 2021

Capital One

McLean, VA

- Developed fully automated end-to-end UI test suites for Enterprise level applications using **Cypress** and **JavaScript**
- Utilized **test generation (TDM) API** to generate real-time data to cover over 30 credential management workflows
- Deployed test suite on **Jenkins** to be run on production applications daily and monitor test statistics using **Mocha Reporter**
- Reduced testing time by 90% and developer maintenance time to < 30 minutes by eliminating need for manual testing

### Undergraduate Research Assistant

Feb 2021 – May 2021

Riggs Lab, UVA

Charlottesville, VA

- Developed VR selection task program to create different reaching task conditions and data outputs needed for study
- Synchronized kinematic data using **C#** program with Oculus motion tracking to determine movement trajectories
- Analyzed location, movement timings, and performance of target selection tasks in controlled lab environment using **Unity**

### Software Engineer Intern

May 2020 – Aug 2020

TRON Air Force

Honolulu, HI

- Collaborated with team of 7 to develop training management application using **Spring**, **React**, **Postgres** and **Docker**
- Programmed REST API using **Spring Boot** and **Postgres** to store data of 38000+ military personnel and training events
- Produced interactive spreadsheet for managers to oversee personnel training events using **React** and **TypeScript**
- Paved way for application to receive thousands in funding for deployment throughout entire Department of Defense

### Undergraduate Research Assistant

Aug 2019 – May 2020

Dependable Systems and Analytics Group, UVA

Charlottesville, VA

- Programmed **Python** script using **Numpy** and **pandas** libraries to optimize surgical error analysis of over 30 videos
- Analyzed error distributions of 6 surgeons and 120 video subtasks using **Excel** to identify prominent surgical anomalies
- Contributed results to research paper and improved the safety and effectiveness of surgical patient care

## Projects

**HoosRooming** | <https://hoosrooming.herokuapp.com/> | *Python, Django, PostgreSQL, Heroku, Travis CI* Jan 2021 – May 2021

- Led team of 5 to build a roommate finder web-application that dynamically matches users to potential roommates
- Implemented distance algorithm to produce tailored list of compatible users and assembled user-to-user messaging system
- Communicated with over 10 stakeholders to evaluate user needs and facilitated scrum processes and workflows

**Intentions** | <https://oit-project.herokuapp.com/> | *Python, Django, PostgreSQL, Heroku, Figma* Mar 2021 – May 2021

- Engineered an introspective journal application that enables users to submit daily entries and responses to prompts
- Spearheaded design of product mainframe using **Figma** and created user interface using **HTML**, **CSS**, and **Bootstrap**
- Deployed application into production using **Heroku** and presented prototype for over 60 potential users

## Technical Skills

**Languages:** Java, Python, C/C++, SQL (Postgres), JavaScript, TypeScript, HTML/CSS

**Frameworks:** Django, React, Node.js, Spring Boot, Cypress, JUnit, Agile/Scrum Methodology, MVC

**Developer Tools:** Git, Docker, VS Code, PyCharm, IntelliJ, VirtualBox, Travis CI, Gitlab CI/CD Pipeline

**Libraries:** Bootstrap, pandas, NumPy, React Redux

**Conferences:** Out 4 Undergrad 2021, Richard Tapia 2021, Out in Tech Spring 2021