Brady Murphy

(703) 505-5437 bradysm@vt.edu 9001 Brook Ford Road, Burke, VA 22015

Hardworking and self-driven software developer looking to define a career by serving others. I'm looking to make an impact at a fast paced company that has a mission to excel in AI and ML applications.

Experience

SOFTWARE DEVELOPER INTERN, WELLS FARGO – JUN 2019 - AUG 2019

Implementing internal applet to manage investment banking research using Java EE, Spring Boot, Maven, and SQL server EE. The single page application features secured login and CRUD abilities to determine research eligibility from the SQL database. The application communicates to the Angular frontend using REST API's.

TEACHING ASSISTANT: INTRO TO C++ AND JAVA , VIRGINIA TECH; BLACKSBURG, VA – AUG 2018 - PRESENT

Expanded students beliefs on the capability of software by conducting in-person demos and labs (C++ , Java). Augmented students problem-solving skills and project completion rate through office hours.

CAPTURE THE SATELLITE INTERN, NASA IV&V; FAIRMONT, WV – MAY - AUG 2018

Performed penetration testing to determine weaknesses in the current NASA satellite security system. Defined new strategies to protect against vulnerabilities in the current software and physical security. Created CCSDS packet validator (Java) to validate incoming TCP/IP data packets. Presented future cybersecurity capabilities to NASA IV&V. Completed JSTAR penetration testing course.

TELE-OPERATIONS AND AUTONOMY SOFTWARE DEVELOPER, VT ASTROBOTICS – 2017-2018

Implemented A* with a Manhattan distance heuristic to read in point cloud data and determine the most efficient path to the mining field using (C++ and ROS). Updated android application that will allow users to teleoperate the NASA RMC robot via a gaming controller. Conducted software meetings weekly to resolve implementation problems and lead the teams direction.

Personal Projects | (Github: Bradysm)

PYSPY – JUN 2019 | REPO: PYSPY

PySpy is a one of a kind python recon tool that logs keystrokes and visual information from the computer it is run on. PySpy utilizes yagmail, to send an email to the deployer every defined interval which contains logged keystrokes and visual screenshots from the computer. Gaining information is easier than ever with the shell script that installs dependencies and initializes the email connection so you can focus on the task at hand.

CS 188 (CAL BERKLEY INTRO TO AI) PACEMAN PROJECTS – JAN 2019 - MAY 2019

Completed paceman projects on informed search, adversarial search, Markov Decision Processes, probabilistic inference (particle filtering and HMM's) and reinforcement learning (python). Useful AI and ML algorithms, such as A*, Q-learning and particle filtering, were implemented for the pacman agents.

MIXED MACHINE – JUN 2018 - SEP 2018 | REPO: MIXED

Constructed a robotic bartender to solve the inability to make mixed drinks efficiently at tailgates and get-togethers. *Mixed* is crafted using Android and Arduino components (XML, Java, C++) which allows the user to communicate with the bartender, using Bluetooth UART, by ordering drinks via the Android application.

THE REAL YOU – FEB 16 | DEVPOST: THE REAL YOU

The real you is a solution to people and businesses not knowing enough about their social media presence due to their lack of emotional intelligence. We constructed an app to augment the general publics' EI in a fast and pristine manner by combining the brains of IBM Watson with the elegance of MaterialUI and React. My focus on this project was building the UI using React.js and CSS3.

Education

VIRGINIA TECH (2017- 2020) – B.S. COMPUTER SCIENCE | 3.96 GPA

- Tau Sigma honors society, Deans list, CS mentors club, SigEp charter brother
- Recipient of the James E. Vrendenburgh, Jr. Leadership Award
- Virginia Tech Computer Science Junior scholar award (highest GPA in class)