VANSHAJ CHOWDHARY

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OBJECTIVE

To obtain a full-time position related to software engineering.

EDUCATION

Worcester Polytechnic Institute (WPI) – Worcester, MA May 2018
Bachelor of Science in Computer Science & Robotics Engineering, GPA 3.87/4.0
Related Coursework:
Computer Vision, Objected Oriented Analysis & Design, Artificial Intelligence, Software Engineering, Algorithms

SKILLS

Programming Languages: Java, Python, C, C++, Racket, SQL, Bash, HTML, CSS
Software: Tensor Flow, Eclipse, Git, SVN, SolidWorks, Arduino, Sublime, MATLAB
Operating Systems: OS X, Linux, Windows

PROJECTS

Reusable Software Components for Multi-Robot Foraging, WPI August 2017 – May 2018

- Developed a library of swarm behaviors for multi-robot systems to perform foraging in C++.
- Delivered a testing framework for performing thousands of simulations using Bash and Python.
- Compared performance of multiple foraging algorithms in Python using numpy, scikit-learn, and pandas.

Object Detection and Localization in Static Environments, WPI November 2017 – January 2018

- Created a program in MATLAB to detect and locate specific objects in cluttered scenes in real-time.
- Evaluated and compared performance of multiple machine learning algorithms for object detection.
- Trained a convolutional neural network to better detect common household objects.

SLAM Robot Exploration, WPI March – April 2017

- Programmed a Turtlebot in Python to autonomously navigate and map an unknown closed environment.
- Implemented SLAM, A* path planning and goal setting to navigate efficiently.
- Utilized ROS to communicate and interact with the robot, and RVIZ to display the generated map.

Programming Sixes' Wild, WPI March – May 2015

- Collaborated with 5 other students in order to design and create a complex application in Java.
- Developed user stories and use cases to determine the requirements of the application.
- Created UML class diagrams with MVC architecture and developed the application following Test Driven Development principles.

EXPERIENCE

Computer Science Student Assistant, WPI August 2017 – May 2018

- Assisted courses by directing lab sessions, grading homework and exams, and creating class materials.
- Provided individual feedback to students by finding creative ways to explain the problem to each student.

Automation Intern, NewBotic Corporation, Worcester, MA June – September 2015

- Worked with five interns to design a new automated assembly line that produced blister packs.
- Evaluated and presented alternative subsystems resulting in four times the existing production rate.