RUDRA GOPAL

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EDUCATION

UNIVERSITY OF MASSACHUSETTS AMHERST, College of Information and Computer Sciences

Exp Graduation: May 2024

Bachelor of Science in Computer Science

GPA: 3.96

Amherst, MA

Relevant Coursework: Data Structures, Calculus III, Linear Algebra, Computer System Principles,

Reasoning Under Uncertainty, Programming Methodology, Introduction to Computation

Commonwealth Honors College student with multi-disciplinary honors

Recipient of Chancellor's Award (Scholarship)

Dean's List (Fall 2020) (Spring 2021)

SKILLS & LANGUAGES

Programming Languages: Python (Proficient), C (Proficient), Java (Proficient), JavaScript (Familiar)

Technologies: Web designing, OpenCV, Arduino, Alexa Skills Kit (ASK), SQL, GNU/Linux, NumPy, PyTorch

Tools & Frameworks: Eclipse, Visual Studio, PyCharm, AWS Lambda, LaTeX

Languages: English (fluent), Gujarati (fluent), Hindi (conversational)

EXPERIENCES

BUILD UMASS Amherst, Massachusetts Oct 2021 - Present

Business Developer

Managing and translating the gap between the BUILD UMASS tech team and a task managing platform client iGoal

- Spearheading meetings with the client to bring in their perspectives regarding the ongoing development of the mobile application
- Planning the development cycle while actively modelling the design that suits the needs of the client

COLLEGE OF INFORMATION AND COMPUTER SCIENCES

Amherst, Massachusetts

Undergraduate Research Volunteer

Jun - Jul 2021

- Developed a PyTorch model that uses a neural network to learn a fair allocation of items to agents based on their preferences
- Demonstrated high Utilitarian Social Welfare for synthetic problem instances (Gaussian and Uniform) based on over 200
- Co-authored a LaTeX report, along with two team members and a Ph.D. mentor

SOFTVAN PVT LTD Ahmedabad, India

Computer Vision Intern

Oct – Dec 2019

- Developed 'Automatic Attendance' facial detection and facial recognition models using OpenCV for clients at a local startup and participated in code review
- Tracked and reported work progress at daily and weekly internal project meetings
- Mitigated manual attendance time to 60%, decreasing the response time

CHHOTUBHAI R. PATEL MEMORIAL EDUCATION TRUST

Gujarat, India

Volunteer

May 2017 & May 2018

- Served as a volunteer at the Trust, where I taught mathematics to students based in under-represented communities
- Organized informational social awareness workshops to emphasize the importance of education in rural areas

PROJECTS

UMass Robotics Club

Oct 2021 - Present

- Developing a robotic prototype for NASA Robotic Mining Competition: Lunabotics while representing the university
- Engineering a path-planning algorithm to enable the robot to automatically find a path towards destination stations while avoiding obstacles
- Technologies used: Robot Operating System (ROS), Python

HackUMass IX Nov 2021

- Awarded Best Beginner Software Hack for developing an intra-university student-to-student food delivery application to solve the issue for students in need of a quick meal in between their busy schedules
- Designed software roadmap, planned development cycle, organized robotics workshop, presented our product to judges
- Technologies used: Android Studio, Flutter, Dart, Firebase

Independent Arduino Modules

Sep 2019 – Jul 2021

- Built an array of Arduino models using Accelerometer, Bluetooth, Relay, Smoke detector, Joystick, and Touch sensor modules
- Programmed in Arduino IDE to develop multi-modular robotic devices with an 87% precision rate
- Technologies used: Arduino, Arduino IDE

Amazon Alexa Game Skills

Apr 2020 - Jun 2020

- Collaborated with peers to build Amazon Alexa game skills
- Developed interactive quiz game skills based on the cricket industry in Hindi and English versions
- Technologies used: Alexa Skills Kits, AWS Lambda

AWARDS

AP Scholar with Honor Award

2020

Scored in the top 4% of India's national Joint Entrance Examinations, out of one million exam takers