Prathit Shukla

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EDUCATION	**UNIVERSITY OF MICHIGAN**	Ann Arbor, MI

College of Engineering
Bachelor of Computer Science, May 2021

GPA: 3.74/4.00 – University of Michigan Dean's List, 2019
Coursework: Data Structures and Algorithms, Machine Learning, Discrete Math, Computer Organization, Linear Algebra
Clubs/Project Teams: Michigan Autonomous Aerial Vehicles, Bursley Multicultural Council, IEEE, Science Olympiad, Tri-M, Mathletes

SKILLS

Languages: C++, C, MATLAB, R, Python, JavaScript, React, HTML + CSS
Tools: Visual Studio, Git, Linux, Bash, Vim, DevOps, Agile, Jira

EXPERIENCE
2019

XOPS, INC — New York, NY
Software Development Intern, Summer 2019
- Learnt React in two weeks to develop additional functionality and resolve front-end software issues in xSUM, a web performance tool
- Collaborated with team members using daily Scrum meetings, planning Sprints in Jira, assisting with debugging issues and technical knowledge while receiving similar aid
- Documented and solved issues with setup and compatibility of development environment across different systems, decreasing the setup time for software team and new users

2017

COMPCITI BUSINESS SOLUTIONS, INC — New York, NY
Computer Engineering Intern, Summer 2017
- Collaborated with network engineers on-site at client's offices in upgrading and maintaining computer networks, troubleshooting software issues, and building computers
- Decreased total hours spent on-site allowing CompCiti to devote additional resources to upgrading existing infrastructure and decommissioning old technology

PROJECTS
2019

MICHIGAN AUTONOMOUS AERIAL VEHICLES — Ann Arbor, MI
Software Programmer, 2019-Present
- Currently implementing Apriltag (similar to QR) detection and pose estimation software into our codebase in C++/C to aid obstacle detection and testing for IARC Mission 9 Competition
- Transitioning from ZCM, a communications framework across components, to ROS for this year's competition

2019

NBA PLAYER IMPACT: AN ML APPROACH — Ann Arbor, MI
Co-Programmer, 2019
- Implementing a QDA/Naïve Bayes approach in R to classify NBA players in different categories based on their impact in certain dimensions (high-volume scorer, playmaker, etc...)
- Utilizing an unsupervised clustering approach as well in order to understand the players with the most positive and unique impact without pre-defined label bias

2018

AUTONOMOUS DRONE OBSTACLE NAVIGATION — Ann Arbor, MI
Team Programmer
- Worked with a 4-person team to implement and test PID control and response filters to calibrate the drone's movement
- Developed obstacle avoidance algorithms for vertical/horizontal/slant blocks in C++

2018

COMMAND LINE EUCHRE — Ann Arbor, MI
Co-Programmer
- Utilized C++ to make a command line interface for a single/multiplayer Euchre, a card game
- Developed complex and random bot strategies to challenge and engage players, creating a traditional game environment
- Tested and debugged using unit test framework macro, running numerous simulated games

ADDITIONAL
- Researched quantitative applications of a Michelson Interferometer and received 3rd at NY Science and Engineering Fair and Outstanding Project Award at LISEF
- President of Orchestra, Member of TRI-M Honor Society, String Ensemble, and District Group
- Tutored students for Programming, SAT, and ACT through National Honor Society, 2018-2019
- AP Scholar with Distinction and National Merit Commended Scholar, 2017