




Prathit Shukla

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EDUCATION	UNIVERSITY OF MICHIGAN College of Engineering Bachelor of Computer Science, May 2021 GPA: 3.76/4.00 – Dean's List, 2019-20 Coursework: Data Structures and Algorithms, Software Engineering, Machine Learning, Computer Security, Computer Architecture, Discrete Math, Linear Algebra Clubs/Project Teams: Michigan Autonomous Aerial Vehicles, Bursley Multicultural Council, IEEE, TechLab at MCity, Science Olympiad, Tri-M, Mathletes	Ann Arbor, MI
SKILLS	Languages: C++, C, MATLAB, R, Python, JavaScript, React, React-Native, Go, HTML + CSS Tools: Visual Studio, Git, Linux, Bash, Vim, Agile, Jira	
EXPERIENCE	XOPS, INC Software Development Intern, Summer 2019 <ul style="list-style-type: none">• 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	New York, NY
2017	COMPCITI BUSINESS SOLUTIONS, INC Computer Engineering Intern, Summer 2017 <ul style="list-style-type: none">• 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	New York, NY
PROJECTS	MICHIGAN AUTONOMOUS AERIAL VEHICLES Software Programmer, 2019-Present <ul style="list-style-type: none">• 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	Ann Arbor, MI
2019	NBA PLAYER IMPACT: AN ML APPROACH Co-Programmer, 2019 <ul style="list-style-type: none">• 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	Ann Arbor, MI
2018	AUTONOMOUS DRONE OBSTACLE NAVIGATION Team Programmer <ul style="list-style-type: none">• 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++	Ann Arbor, MI
2018	COMMAND LINE EUCHRE Co-Programmer <ul style="list-style-type: none">• 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	Ann Arbor, MI
ADDITIONAL	<ul style="list-style-type: none">• 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	