Prathit Shukla

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EDUCATION

UNIVERSITY OF MICHIGAN — Ann Arbor, MI
College of Engineering
Bachelor's in Computer Science, May 2021

GPA: 3.74/4.00 – University of Michigan Dean's List, 2019
Coursework: Intro to Data Structures, Data Structures and Algorithms, Discrete Math, Computer Organization, Data Mining and Statistical Learning
Clubs/Project Teams: Michigan Autonomous Aerial Vehicles, Bursley Multicultural Council, Science Olympiad

SKILLS

Programming: C++, C, MATLAB, Python, BASIC, R
Web: JavaScript, React, HTML + CSS
Tools: Linux, Bash, Visual Studio Code, Git, DevOps, Agile, Jira

EXPERIENCE

XOPS, INC — New York, NY
2019 — **Software Development Intern, Summer 2019**
- Learnt React within 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, ranging from planning Sprints in Jira to 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.

COMPCITI BUSINESS SOLUTIONS, INC — New York, NY
2017 — **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 in both individual and team tasks.
- Decreased total hours spent on-site during July and August allowing CompCiti to devote additional resources to upgrading existing infrastructure and decommissioning old technology, cleaning up and modernizing the company.

PROJECTS

AUTONOMOUS DRONE OBSTACLE NAVIGATION — Ann Arbor, MI
2019 — **Team Programmer**
- Worked with a 4-person team to setup a custom-built quadcopter using an Arduino, BeagleBone Blue board and Mission Planner software.
- Implemented and tested PID control and response filters to calibrate the drone's movement.
- Developed obstacle avoidance algorithms for vertical/horizontal/slant blocks in C++.

COMMAND LINE EUCHRE — Ann Arbor, MI
2019 — **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.

SMART IMAGE RESIZING WITH COMPUTER VISION — Ann Arbor, MI
2018 — **Co-Programmer**
- Built an image resizing algorithm in C++ that weighs sections of an image and removes unnecessary pixels to retain important details.
- Implemented the seam-carving algorithm for content-aware resizing.

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 SAT, ACT, and classwork through National Honor Society, 2018.
- AP Scholar with Distinction and National Merit Commended Scholar, 2017.