

**EDUCATION**

**Bachelor of Science (Honors): Computer Science, December 2019**  
**Mississippi State University (MSU)** – Starkville, MS  
CGPA: 3.96  
Minor: Mathematics, Business Management

**EXPERIENCE**

**Machine Learning SWE Intern | ADTRAN** [Summer 2018]  
• Performed data loop Analysis on VDSL Data Hlog, QLN, SNR, and BAT for self-healing automated network  
• Introduced guided performance benchmarks for anomaly detection in access networks using supervised/unsupervised/regression Machine Learning techniques

**Software Engineering Intern (Fiber Access) | ADTRAN** [Spring 2018]  
• Delivered a new CLI interface for the EPON OLT network architecture in C++ using YANG over NETCONF  
• Architected new network interface for ONT provisioning port over REST to ease configuration protocol  
• Aided in the layout of new software packages, implemented unit testing and code refactoring while engaging in agile workflow and scrum standups to extend CI/CD

**Google CodeU Developer | GOOGLE** [Spring/Summer 2017]  
• Designed and developed a messaging app in C++ along with regular code reviews under the mentorship of Google Engineers  
• Improved the client GUI of the app, added persistent message data storage, implemented a chat bot and statistics analyzing system

**Freshman Year Navigator | Center of Student Success** [Fall 2016 to Fall 2017]  
• Mentored 300+ Freshman year students, served as a resource to help them succeed during their first year at state academically or otherwise (Basically, I was a campus parent)

**RESEARCH**

**Undergraduate Researcher | High Performance Computing, MSU** [Fall 2017 - Present]  
• Constructing an API to compute intersection 2D/3D mesh surfaces by leveraging open-source libs CGAL, libIGL as a computational tool module for Finite Element Analysis  
• Profiled open source project MAST to improve runtime and developed python/bash scripts as package installer

**Undergraduate Researcher | CSE Department, MSU** [Spring 2016]  
• Engineered a hexapod robot to navigate through a maze autonomously using ultrasonic sensors as a proof of concept for use in search and Rescue operation.  
• Presented research abstract "Object Detection and Avoidance Using Hexapod Robot" at University Symposium

**PROJECTS**

**Personal Website | [www.anawarkar.com](http://www.anawarkar.com)** [Summer 2018]  
• Deployed a bootstrap themed static website with HTML/CSS and a few interesting JavaScript libraries

**NOTIFY APP | ADTRAN 18 - Hackathon** [Summer 2018]  
• Constructed a java Android app backed with Reinforcement Machine Learning to prioritize phone notifications

**FINANACIAL VOICE | Crimson Hacks - Hackathon** [Spring 2018]  
• Built a smart speech-enabled assistant to help blind people manage finance budget  
• Integrated Machine Learning SVR algorithm python backend to make stock trade recommendations

**Hack State - Hackathon, (1<sup>st</sup> place)** [Fall 2017]  
• Unified the MYO Armband and MYOduino API to wirelessly manipulate the mini scaled construction crane in Arduino with C++ by using hand gestures  
• Placed 1<sup>st</sup> at Mississippi State University's first hackathon powered by MLH

**OTHER PROJECTS**

**Snake Game | Red-Box Movie Software Features | Cheat card Game** [Fall 2015 - 2017]

**TECHNICAL SKILLS**

**Programming Languages:** C/C++, Python, Shell, Java, PHP, Verilog, HTML/CSS  
**Technologies:** Flask, Perforce, GitHub, JIRA, Arduino, G-Prof, Postman, MULTI, Android