

# Rohith Pentaparth

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## EDUCATION

University of Michigan, College of Literature, Sciences & the Arts

Ann Arbor, MI

B.S., Data Science and Computer Science | GPA: 3.60/4.00

Expected December 2018 | Full-Time 2019

- **Hackathons & Honors:** JPMorgan Brooklyn Hackathon (3rd place), MHacks X, University Honors, Regents Merit Scholar
- **Coursework:** Machine Learning (EECS 445), Computer Vision (EECS 442), Natural Language Processing (EECS 595) Web Systems (EECS 485), Data Structures & Algorithms (EECS 281), Computer Organization (EECS 370)

## EXPERIENCE

J.P. Morgan Software Engineering Internship – Financial Technology

New York City, NY

Full-Stack Developer & Data Engineer

January 2018 - December 2018

- Developed a generalized monitoring dashboard capable of retrieving and visualizing real-time job & batch loan transactions
- Reduced costs by approximately \$127,000/yr, and predicted to save \$3 million with onboarding of additional datasets
- Built relational DB for persistence of user preferences & comments, and utilized Angular 5 for job & batch status updates
- Selected from 400+ applicants to work with corporate sponsor in Ann Arbor during school and in NYC from June-August

Structure Prediction & Algorithms Lab – Bioinformatics Research

Ann Arbor, MI

Algorithms Researcher in Yang Zhang Lab

June 2017 - May 2018

- Automated data analysis tasks by scripting various programs and utilizing Python modules
- Improved protein contact prediction algorithms with the use of random forest classifiers

Michigan Solar Car Team – Competitive Solar Car Racing

Ann Arbor, MI

Outreach Specialist in Business Division

January 2015 - December 2015

- Established primary contact for Solar Car's 2015 Unveil at Henry Ford Museum
- Secured various funds for solar car parts for 2015's Aurum, team raised over \$1 million in total

FIRST Robotics – High School Robotics Competitions

Okemos, MI

C++ Programmer and Tester

September 2012 - June 2013

- Performed basic testing of C++ code for driver controls of robot arm

## LEADERSHIP

Science Learning Center

September 2016 – December 2016

Biochemistry Tutor and Group Facilitator

- Managed a group of 10 Michigan undergraduates enrolled in MCDB 310, receiving 4.6/5.0 in overall student feedback

Residence Halls Association at Michigan

May 2015 – May 2016

Vice President of Internal Relations

- Organized campus events in programming committee, & ensured communication lines between hall councils
- Built relations/ designed 500+ person events with RHA members representing various U.S. universities

## TECHNICAL SKILLS

Languages: C/C++ (intermediate), Python (intermediate), PL/SQL (intermediate), JavaScript (beginner), MATLAB, R

Technologies & Cloud Experience: Oracle DB, Angular 5, Scikit-learn, AWS Lex, Hadoop MR

Operating Systems: MacOS, Windows, Ubuntu, iOS

Environments: Visual Studio Code, IntelliJ, XCode, Vim

## PERSONAL PROJECTS

Lex Chatbot for Troubleshooting (AWS Lex, AWS Lambda, Hackathon Team)

- Configured an NLU Lex chatbot to respond to user questions by redirecting them to teams most likely to have answers
- Built a prototype that automates manual work done by support teams, saving approximately 74,880 hours annually

Slack Bot for Cryptocurrency Tracking (Python, Flask)

- Developed a Python bot, built on the Flask framework, that tracks/delivers cryptocurrency data to Slack via slash commands
- Built a Heroku PostgreSQL database to store and graph temporal data for users to view on Slack's chatbox

Facial Recognition using Principal Component Analysis (MATLAB)

- Generated eigenfaces and reconstructed images for recognition using various linear algebra techniques
- Developed MATLAB scripts to run thresholds on image inputs to check for human features