Rohith Pentaparthy

penta@umich.edu | 517.402.5378 | ropenta.github.io

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 | Seeking Full-Time 2019

- Hackathons: PennApps XVIII (Top 30 Hacks, Best Use of DocuSign API); JPMorgan Hackathon 2018 (3rd); MHacks X
- 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 configurable monitoring dashboard capable of retrieving and visualizing real-time job & batch loan transactions
- Built relational DB for persistence of user preferences & comments, and utilized Angular 5 for job & batch status updates
- Saved \$3M in development fees through onboarding of additional datasets and eliminated \$150K in annual recurring costs
- 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 & Developer in Yang Zhang Lab

June 2017 - May 2018

- · Automated traditionally manual 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

- Led three-person subteam to establish 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 in a team of 40 high-school students

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), TypeScript (beginner), Java Spring, R

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

Operating Systems: MacOS, Windows, Ubuntu, iOS Environments: Visual Studio Code, IntelliJ, XCode, Vim

PERSONAL PROJECTS

Forest-Fire Detection and Notification using Computer Vision (OpenCV, MongoDB, PennApps Hackathon)

- Built OpenCV tool to classify forest fires from residential video footage and to extract size and growth analytics on the fires
- Utilized Twilio API for pre-emptive phone alerts to people nearby and MongoDB to allow residents to add footage systems

Lex Chatbot for Troubleshooting (AWS Lex, AWS Lambda, JP Morgan Hackathon)

- 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