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
- 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), 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