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# Riyu Banerjee

## Education

**University of Michigan, Ann Arbor, MI**
**Major:** Computer Science
College of Literature Science & Art
Expected Graduation: Winter 2018

## Relevant Courses

**EECS 492** (Intro to AI), **EECS 485** (Web Systems), **EECS 482** (Intro to OS),
**EECS 445** (Intro to ML), **EECS 398** (Intro to Autonomous Robots),
**EECS 388** (Intro to Computer Security),
**EECS 376** (Foundations of Computer Science),
**EECS 370** (Intro to Computer Organization),
**EECS 281** (Data Structures and Algorithms)

**Currently Taking**

**EECS 498** (Reinforcement Learning), **EECS 442** (Computer Vision)

## Job Experience

**Software TDP Intern | Capital One** **June 2017 - August 2017**

- Built CI/CD Paas pipeline on top of Kubernetes within a Flask based UI. Utilized the Docker SDK as well as the Kubernetes API
- Integrated new filtering feature for internal monitoring service through use of Angularjs, Nodejs, and EJS
- Strengthened presentation skills by pitching Paas POC to upper management
- Rapidly learned new tools and frameworks to complete individual and team goals for the 10-week program

**Software Development Intern | Foresee** **May 2016 - August 2016**

- Assisted in the transition from data centers to cloud hosted applications on AWS
- Developed a DevOps infrastructure automation system to create an operation maintained tool for creating infrastructure
- Used both Ansible and Jenkins for the creation and deployment of micro-services as well as rollback code

**Web Developer | MSU College of Natural Science** **October 2013 - May 2014**

- Migrated the Natural Science departmental website from WordPress to a new site based on the Mura CMS
- Authored web content in HTML/CSS and Javascript for the site

## Projects

**Amazon Review Helpfulness Prediction** **January 2016 - May 2016**

*Algorithm that takes in data sets of Amazon reviews and finds a model to predict helpfulness*

- Converted Amazon reviews into a set of features such as word2vec values, word count, and sentiment.
- Experimented with various machine learning algorithms such as SVM and Logistic Regression to find the best fit

**Better Busing Application** **February 2015 - May 2015**

*A replacement for the current university bus app with stat tracking of users sent to a server for extrapolation of meta-data*

- Utilized the Google Maps API on Android to provide a smoother and more accurate experience than current bus app

**MHacks Android Application** **October 2014 - August 2015**

*Developed the MHacks V and 6 Hackathon applications*

- Updated and utilized Android 5.0 material design standards including floating action buttons.
- Pulled data from a Parse backend and cached data on application

**Backseat Driver Android Application** **September 2014**

*Application that teaches step by step how to drive a stick-shift vehicle using data from the OBD II port by utilizing the Open-XC library*

- Awarded Chrysler's "Connected Car" award, Farm Log's "Best use of Mobile Sensor Data", and Best Societal Hack at MHacks IV

**High School Robotics | Grand Blanc High School (FRC) #2337** **September 2010 - May 2013**

- Participated in the First Robotics Competition, in which high school students design robots to compete in challenges.
- Implemented PID motor control algorithms to optimally set the velocity of a wheel and best maintain RPM

## Extra Curricular

**Mentorship Executive | Michigan Hackers CORE** **September 2014 - May 2017**

- Organized mentorship to create and foster the "Hacking" community at UofM through tech talks, hack nights, and other events
- Raised awareness of other collegial hackathons to the student body as well as organized transportation.

**Tech Team | MHacks CORE** **April 2015 - September 2016**

- Collaborated with the MHacks team to host MHacks, one of the largest and most prestigious collegial hackathons.
- Planned and created the applications and more for future events along with the rest of the development team.

**Mentor | First Robotics Competition Team** **October 2014 - May 2015**

- Mentored High School aged children in the FRC program in Java and basic programming concepts

## Technical Skills

**Languages: C++, Java, Python, Javascript, HTML, CSS, Bash, SQL**

**Technologies: Flask, AngularJs, Android, Git, Docker, NodeJs, Jinja**