EDUCATION

Michigan State University, East Lansing, Mi

May 2017

- Bachelor of Science (B.S.) in Computer Science, Cognate in Mathematics
 - Cumulative GPA: 3.75 / 4.00
 - · Graduated with Honors

WORK EXPERIENCE

Institute For Cyber-Enabled Research

June 2016 – May 2017

- Technical Student
 - Submitted over 10,000 jobs on the High Performance Computer to benchmark I/O with C++
 - Produced graphs with python (pandas, numpy, matplotlib) to prove that the scratch file system had 8x better I/O bandwidth than research file system
 - Teaching assistant for Intro to Linux, Intro to HPCC, and Big Data workshops
 - Installed software requested by customers onto High Performance Computer

Matrix

May 2015 - May 2016

- Back-end Developer
 - Added user functionality to ARCS (Archaeological Resource Cataloguing System) by creating a login modal, forgot password form, upload and crop profile picture, and a profile page in cakephp and html
 - Implemented an angularjs ARCS plugin to give researchers admin control of ARCS
 - Took ownership of code and database quality wrote scripts to clean mySQL database, cleaned and tested large sections of legacy code, and tested user functionality

Global Observatory for Ecosystem Services

June 2014 – November 2014

- Web Developer
 - Updated mapping interface from Google Leaflet to ArcGis ESRI map on MRV website
 - Implemented a stratified plot sampling algorithm and sampling design form in python (django) and javascript

PROJECTS

GE PETT: Predix-Enabled Toy Train

- Worked with four other MSU Computer Science seniors to designed a Bachmann N-scale toy train-set to demonstrate the power of GE's Predix
- Used microcontrollers and sensors to locate and control all trains on the train-set
- Implemented a website to visualize and interact with the data collected
- Produced a **video** about the delivered product

Voice Analyzer

- Applied machine learning and data techniques to classify gender, age, and dialect of a human sound recording
- Collected and processed around 15,000 sound clips of human voice by using python (librosa, numpy, pandas, matplotlib)
- Dealt with missing and vague data and used sampling techniques to get better data distribution

LANGUAGES

Python, C/C++, Matlab, Java, Javascript, SQl, NoSQL, Hive, Pig, HTML, CSS

TOOLS

Linux/Unix, Hadoop (MapReduce), Spark, Frameworks (Django, Cakephp, Angularjs, React/Redux), jQuery, Twitter Bootstrap, AWS, Docker, Vim, Version Control (git, svn)

CLUBS

MSU Data Science, MSU ACM