

RESEARCH EXPERIENCE

University of Michigan College of Engineering

Ann Arbor, MI

Research Assistant; advised by Professor Danaï Koutra

Aug 2016 – Present

- Wrote a batch processing pipeline (MATLAB) to convert time series fMRI networks of subjects into voxel-wise correlation edge lists.
- Investigated ways to determine ideal aggregation granularity on large, time-evolving fMRI networks.

Biosocial Methods Collaborative

Ann Arbor, MI

Research Assistant

May 2015 – Dec 2015

- Documented and cleaned data collected from eye tracking, EEG, EKG, and GSR for university researchers.
- Conducted psychological studies by obtaining signed consent and applying facial sensors on subjects.

University of Michigan Medical School

Ann Arbor, MI

Laboratory Assistant

Sept 2013 – May 2014

- Performed tasks such as collecting tail samples, preparing PCR gels, and sorting embryo specimens.
- Provided fish feed and monitored water quality to sustain health of zebrafish population.

WORK EXPERIENCE

Vodori

Chicago, IL

Software Consultant Intern

May 2016 – Aug 2016

- Contributed to scrums as member of full-stack (JavaScript, Java, MySQL, Less) team to develop editable website components for global healthcare company clients.
- Developed Dojo widgets integrated with existing Pepper CMS to optimize real-time editing experience.
- Built project-wide solutions, such as a JavaScript module that simulates media queries.

Integrative Systems + Design

Ann Arbor, MI

Programmer Analyst

June 2015 – Jan 2016

- Updated course offerings displayed on ISD website through in-house content management system.
- Optimized front-end usability, such as an interactive (JavaScript, Bootstrap) course registration form.

EDUCATION

University of Michigan

Ann Arbor, MI

Bachelor of Science: Computer Science

Sept 2013 – Apr 2017

- GPA: 3.5/4.0
- Current coursework: Operating Systems (EECS 482), Multidisciplinary Software Development (EECS 498)
- Past coursework: Web Databases & Info Systems (EECS 485), Data Structures & Algorithms (EECS 281), Foundations of Computer Science (EECS 376), Linear Algebra (MATH 214)

PROJECTS

MDP: Cloud-Based Ocular Disease Diagnosis

Web app to predict genetic causes of retinal dystrophies; team sponsored by KEC

Jan 2016 – Dec 2016

- Implemented prototype (Flask, jQuery, PostgreSQL) that collects patient data to feed into and display results of machine learning module.
- Assumed role as contact point with corporate sponsor and organized prototype demos.

Formal Concept Analysis Tool

Research to extract and view formal contexts; advised by Professor Jun Zhang

Jan 2016 – Apr 2016

- Coded algorithms (C++) to parse concepts and apply set operation functions on input dataset.
- Devised method to output visualization (Python) of computed concept lattice.

SKILLS

- Languages: C++, Python, MATLAB, Java
- Web & frameworks: JavaScript, jQuery, Dojo, AngularJS, D3.js, HTML/CSS, Less, Flask, Spring
- Other: Git, Docker, MySQL, PostgreSQL, Hadoop