

Vinay Hiremath

Education

- 2018 - current **University of Zürich and ETH Zürich**, *MSc in Neural Systems and Computation*, Zürich, Switzerland.
Prospective research interests include biologically-inspired models of learning and computation, with a focus on natural language processing applications. Mentored by Shih-Chii Liu.
- 2013 - 2017 **University of Michigan**, *BSc in Computer Science and Cognitive Science*, Ann Arbor, MI.
Majored in Computer Science (Major GPA: 3.9/4.0) and Cognitive Science (Computational) with a Minor in Mathematics. Enrolled in the LS&A Honors Program with a major annual scholarship.
- 2009 - 2013 **International Academy**, Bloomfield Hills, MI.
Graduated with an International Baccalaureate Diploma (GPA: 3.86/4.0) after having taken Higher Level courses in Physics, Biology, Math, and Spanish with Standard Level courses in English and History. (Score of 36 on the ACT and 2330 on the SAT)

Experience

- Sept. 2020– Dec. 2020 **Teaching Assistant**, *ETH Zürich*, Zürich, Switzerland.
Worked as a teaching assistant (TA) for the Learning in Deep Artificial and Biological Neuronal Networks course, to help answer student questions, design and grade assignments, and provide students assistance with course material.
- May 2018– Aug. 2018 **Engineering Intern**, *Transcend.io*, San Francisco, CA.
Working with an early-stage startup to build out features for a privacy platform for GDPR compliance. Currently working with a variety of external APIs to allow customers of Transcend clients access to their data across a span of services.
- Sept. 2016– Dec. 2017 **Research Assistant**, *University of Michigan EECS*, Ann Arbor, MI.
Working with Prof. Rada Mihalcea and Prof. Jia Deng using multimodal data (MovieQA, consisting of video clips and associated subtitles, scripts) to improve character recognition and eventually develop better question-answering models.
- Jan. 2016– Dec. 2017 **Instructional Aide (TA)**, *University of Michigan EECS*, Ann Arbor, MI.
As a TA during three semesters for EECS 445 (Intro. to Machine Learning), created projects and problem sets to provide students with practice on ML techniques taught in class. Held weekly discussion sections along with office hours.
- May 2016– Aug. 2016 **Engineering Intern**, *SalesforceIQ*, Palo Alto, CA.
Worked with the Platforms team to modify all backend services for deployment on multiple datacenters, including handling dynamic configuration management, health checks, and Docker containerization using tools such as Consul by HashiCorp.
- May 2015– Aug. 2015 **Backend Intern**, *FarmLogs*, Ann Arbor, MI.
Worked in the Clojure language to add new features to a backend. Gained experience in developing APIs, including interfacing with web/mobile clients and databases (PostgreSQL). Worked with ingesting large datasets including nationwide soil data, etc.
- Feb. 2014– Apr. 2015 **Computer Operator**, *University of Michigan Medical School*, Ann Arbor, MI.
Provide instructional and technical support at the Learning Resource Center computer lab for medical students. This includes troubleshooting potential workstation issues as well as maintaining the lab's overall condition.
- Oct. 2014– Dec. 2014 **Research Assistant**, *University of Michigan EECS*, Ann Arbor, MI.
Worked with Dr. Satinder Singh Baveja and Dr. Richard L. Lewis on a more domain-independent implementation of computational reinforcement learning. Learned the necessary background material by covering relevant papers.
- Sept. 2013– May 2014 **Research Assistant**, *Undergraduate Research Opportunity Program, Brooks Lab, Univ. of Michigan*, Ann Arbor, MI.
Worked with Prof. Charles Brooks III on a computational biophysics project involving the evaluation of potentially more efficient protein folding simulation methods. Improved skills in generating and visualizing large quantities of data.
- June 2012– Aug. 2012 **Research Assistant**, *High School Honors Science Program, Michigan State University*, East Lansing, MI.
Worked with Dr. Mitchell McGrath in the Plant Sciences department to identify and outline differential expression during sugar beet germination. Wrote Python programs and adapted existing tools to analyze gene sequencing results.

Activities

- Sept. 2017 to April 2018 Member of Michigan Student Artificial Intelligence Lab (MSAIL) board. Helped to plan research presentations and reading groups surrounding recent machine learning advances for a student audience.
- Sept. 2013 to Dec. 2015 Participated in various hackathons: MHacks Fall 2015 (Top Five Hack), Hack the North Fall 2014, PennApps Fall 2014, MHacks Fall 2014, McHacks Spring 2014, MHacks Fall 2013, HackMIT Fall 2013.
- May 2015– Aug. 2015 Member of the MHacks 6 Core Team. Developed the backend for the sponsor portal which allowed sponsors to easily search through, filter, and star hackathon applicants for recruiting purposes.
- Sept. 2014 to May 2015 Member of the technology team on the optiMize Core Team. Built the base API for newsletter submissions and team information, having the opportunity to further the organization's goals of social innovation.
- Sept. 2014– Jan. 2015 Member of the Michigan Hackers Core Team in charge of hosting a workshop for students to get involved in side projects (hacks). Created slides to teach JavaScript/Node.js along with a template project for students to emulate.