# MELISSA CHEN

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#### **EDUCATION**

#### University of Illinois at Urbana-Champaign

Aug 2018 - May 2022

B.S. in Computer Science, Minor in Mathematics

GPA: 3.98/4.00

Relevant Coursework Software Engineering Studio, Discrete Structures, Statistics and Probability for CS, Data Strutures, Computer Architecture, Numerical Methods, Linear Algebra, Systems Programming, Database Systems, Bioinformatics, Differential Equations, Algorithms and Models of Computation\*, Artificial Intelligence\* (\* FA20 courses)

Honors Chancellor's Scholar, James Scholar, Phi Eta Sigma, Tau Beta Pi

#### **EXPERIENCE**

#### Software Engineering Intern, Facebook (Privacy Infra Org)

May 2020 - Aug 2020

Developed a new framework to test feature extractors used to detect user-identifiable information

Decreased the time needed to run experiments by half and created an intuitive UI to expedite feature extractor development

#### Course Assistant, CS 233 Computer Architecture

Jan 2020 - Present

Hosted office hours to help students with labs in Verilog and MIPS

Assisted a TA in weekly discussion sections to reinforce computer architecture concepts in small-group settings

#### Undergraduate Researcher, University of Illinois at Urbana-Champaign

Sept 2018 - Sept 2019

Studied the theory of non-negative matrix factorization and applied knowledge on cancer genomics data

Researched missingness mechanisms and imputation methods to compare their relative speeds

Performed literature survey on missing data and neural networks to create classifier to handle missing features

#### Summer Research Intern, Academia Sinica Institute of Information Sciences

June 2018 - Aug 2018

Analyzed academic papers on various topics in computer vision

Experimented with Tensorflow and Keras on open source examples

#### **PROJECTS**

Safeways, CS 196 Semester Project

Sept 2018 - Dec 2018

A webapp that plots safe routes around recent and frequent crime locations, using data from the MotoSocrata crime API

# Non-negative matrix factorization on cancer gene expression data

Sept 2018 - Dec 2018

Used non-negative matrix factorization to achieve 85% accuracy on the PANCAN dataset of cancer genomics data Awarded People's Choice Award at end-of-semester poster session

### **ACTIVITIES**

# Co-Director, HackIllinois 2020

Apr 2019 - Mar 2020

Oversaw and coordinated efforts of 50 team members to build the premier collegiate open source hackathon, hosting 800 attendees, 35 mentors, 17 companies, and 200 volunteers for 36 hours at the University of Illinois at Urbana-Champaign

#### Content x Diversity Co-Chair, Reflections | Projections 2020

Dec 2019 - Present

Coordinated committee of 15 students to plan a week of events for the largest student-run tech conference in the midwest Reimagined ACM Symposium to become an event to match K-12 classrooms with college students' projects to inspire young students, especially those from underrepresented groups, to consider computing

#### Events Chair, CS Mental Health Committee

Aug 2020 - Present

Spearheaded ideation and implementation of events to facilitate and normalize discussion about mental health in CS Managed marketing and branding for social media and event promotion

#### Explorations (Technical) Co-Chair, Women in Computer Science

May 2020 - Present

Created and hosted workshops to help female students feel more comfortable studying computing

Other: Girls Who Code Facilitator, Sail 2019 Staff Member

## **SKILLS**

**Programming Languages and Frameworks** C, Python, C++, MongoDB, Neo4J, SQL, Verilog, MIPS, Java, Keras, Django, React.js, Hacklang

Languages English, Chinese, Spanish, Japanese