

MELISSA CHEN

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EDUCATION

University of Illinois at Urbana-Champaign

Aug 2018 - May 2022

Bachelor of Science in Computer Science, Minor in Mathematics

GPA: 3.93/4.00

Relevant Coursework Discrete Structures, Statistics & Probability, Data Structures, Computer Architecture, Numerical Methods, Linear Algebra, Systems Programming, Database Systems, Bioinformatics, Differential Equations, Algorithms & Models of Computation, Artificial Intelligence, Probability Theory, Social Visualization*, Programming Languages & Compilers*, Reinforcement Learning*, Trustworthy Machine Learning* (* denotes courses in progress for Spring 2021)

Honors Chancellor's Scholar, James Scholar, Phi Eta Sigma, Tau Beta Pi, Dean's List (FA18, SP19, FA20, SP20)

SKILLS

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

Languages English, Chinese, Spanish, Japanese

EXPERIENCE

SPIN Undergraduate Research Intern, National Center for Supercomputing Applications

Jan 2021 - Present

Created data visualizations of crop yields in the midwest and worked on machine learning models for classifying crops using satellite image data

Undergraduate Research Assistant, University of Illinois at Urbana-Champaign

Oct 2020 - Present

Performed literature survey on plant heritability and presented readings in weekly meetings

Generated ground-truth data for several crop types in R

Course Assistant, CS 233 Computer Architecture

Jan 2020 - Present

Held weekly office hours to help students with labs in Verilog and MIPS

Developed questions to aid in students' understanding of course content in virtual learning settings

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 experiment runtime by half and created an intuitive UI to expedite feature extractor development

Undergraduate Researcher, University of Illinois at Urbana-Champaign

Sept 2018 - Sept 2019

Studied theory of non-negative matrix factorization and applied knowledge on cancer genomics data to achieve 85% accuracy on the PANCAN dataset of cancer genomics data

Performed literature survey on missingness mechanisms, imputation methods, and neural networks to create classifier to handle missing features

Summer Research Intern, Academia Sinica Institute of Information Sciences

June 2018 - Aug 2018

Read and analyzed research papers on computer vision and machine learning

ACTIVITIES

Events Chair, CS Mental Health Committee

Aug 2020 - Present

Planned and promoted events with committee to increase mental health awareness

Designed informational social media graphics to encourage mental health awareness and self-care, spread information about our events, initiatives, and committee.

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

May 2020 - Present

Planned and presented tutorials with group-based activities on Git, terminal, hackathons, and interviews

Directed virtual hackathon for female and non-binary students with 60 registrants, 7 project submissions

Organized 5 project teams to work on social good and STEM education-related projects

Facilitator (Volunteer), Girls Who Code @ UIUC

Sept 2019 - Present

Designed and coordinated delivery of curriculum for introductory level Scratch and data science workshops

Co-Director, HackIllinois

Apr 2019 - Mar 2020

Oversaw collaborative 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