Ethan Kraus

he/him | Ann Arbor, MI 48104 | ekkraus@umich.edu | 267-397-0181
https://www.linkedin.com/in/ethan-kraus-693428223

EDUCATION

University of Michigan **Ann Arbor, MI**
Bachelors of Science in Computer Science, Data Science *April 2025*
GPA: 3.91 / 4.00

- **Relevant Coursework:** Data Structures and Algorithms, Introduction to Computer Organization, Foundations of Computer Science, Multivariable and Vector Calculus, Discrete Math, Applied Linear Algebra
- **Awards/Honors:** University Honors Fall 2021, University Honors Winter 2022, University Honors Fall 2022

WORK EXPERIENCE

Wedgewood Pharmacy **Swedesboro, NJ**
Information Technology and Computer Programming Intern *May 2022 - July 2022*

- Executed deployment of an update to ERP software for over 200+ employees through use of Desktop Central to guide those who needed help through manual installation process
- Oversaw distribution of new employee orientation equipment, including testing of laptops and other peripheral technologies taken on and off-site
- Developed and organized first copy of an IT document repository on Excel to keep track of various servers, routers, etc. for on-site service rooms
- Participated in note-taking and brainstorming preliminary project plans for both IT desktop alignment meetings and code review sessions with software development team

PROJECT EXPERIENCE

C++ Implementation of Graph Algorithms **Ann Arbor, MI**
Data Structures and Algorithms *November 2022 - December 2022*

- Optimized time and memory efficiency given a custom set of constraints for minimum spanning tree problem
- Created a branch and bound algorithm to solve traveling salesperson problem using different insertion heuristics

C++ Relational Database **Ann Arbor, MI**
Data Structures and Algorithms *October 2022 - November 2022*

- Implemented full-scale development of a functioning relational database using hash tables
- Developed an efficient user interface that allowed for custom insertion, deletion, etc. of mass quantities of data

C++ Machine Learning Program for Natural Language Processing **Ann Arbor, MI**
Programming and Introductory Data Structures *March 2022 - April 2022*

- Built a recursive machine learning program for Multivariate Bernoulli Naive Bayes Classifier using binary search trees
- Utilized map data structure to automatically organize, store, and update probabilities of certain words and phrases from appearing in various categorized Piazza posts

EXTRACURRICULARS

Tech 4 Social Good Project Team, *Software Developer* *January 2022 - Present*
Michigan Hackers, *Club Member* *January 2022 - Present*
Eta Kappa Nu Honor Society for Electrical and Computer Engineers, *Fundraising Chair* *August 2022 - Present*
Pencils of Promise Fundraising Club, *Secretary* *September 2021 - Present*
MUSKET Student Theatre Club, *Video Editor for Marketing Team* *August 2021 - Present*

SKILLS

Computer: C++, C, Python, Java, HTML, CSS, MATLAB, Excel