Zhe Chen
czhe@umich.edu | (734) 604-1855
555 E William Street, Ann Arbor, MI

EDUCATION

University of Michigan – Ann Arbor Ann Arbor, Michigan
B.S. Computer Science | Data Science | Minor: UX Design Anticipated Graduation: May 2024
Cumulative GPA: 3.85/4.00 University Honors
Relevant coursework: Database Management System, Machine Learning, Data Structures and Algorithm, Applied Regression Analysis, Data-Oriented Programming, Linear Algebra, Discrete Math
Technical Skills: C++ (3yrs), Python, SQL, MATLAB, R Studio, Jupyter Notebooks, HTML, Java, Git

PROFESSIONAL EXPERIENCE

University of Michigan School of Public Health, Ann Arbor, MI, USA. Oct. - Present 2022
Process Improvement Data Analyst

- Identified opportunities for improvement and streamlining in evaluation processes of user input based on 200+ courses to improve time and space efficiency through data analysis.
- Set up a JDBC (SQLite/Microsoft Access) for creating a database to store user registration and course information, provided query languages to search specific results, or filter unqualified data. Automated manual tasks that took 1~2 days to 20 minutes.
- Customized the learning management system interface and course evaluation infrastructure to improve user experience and analysis efficiency by integrating Qualtrics survey into Canvas, improved efficiency to 70% when retrieving data from various courses and their versions.

Sinosoft Company Limited, Shanghai, China May - Aug. 2021
Product Analyst Assistant

- Tested 5 products manually, observed 12 bugs in total, described defects and differences to expected results; individual work resulted in a 33% improvement over the old version.
- Conducted competitive product analysis following SWOT framework for 4 different insurance products to help the team locate breakthrough points and product promotion focus; resulted in 1.2x work efficiency.
- Identified significant attributes of users; generated reports about test cases, strategy references, and improvement direction for 3 insurance products according to UI diagrams. Assisted the development team in fitting user needs with 100% accuracy.

PROGRAMMING PROJECTS

Machine Learning Course Project Sep. - Dec. 2022

- Pre-processed data (removed stop-words and meaningless words, grouping) and performed feature extraction and engineering before training the dataset into the model to exclude noise and potential bias; Packages sklearn and nltk from Python are familiarized and used in the training process.
- Designed a convolutional neural network with 80% accuracy to determine dog breeds based on images.
- Applied transfer learning and data augmentation on two different models to observe the change in AUROC and accuracy scores; Explored the connection between the number of frozen layers and its resulting AUROC performance, reached a conclusion that fine-tune FC layer has the best TEST score while its TRAIN and VAL scores are lower from the aspect of AUROC.

Battling Imposter Syndrome, Google Software Product Sprint June - Aug. 2022

- Leveraged various Google Cloud Platform APIs, including App Engine, Natural Language, and Datastore, to provide guidance for target users with imposter syndrome using **Java**, **JavaScript**, **HTML**, and **CSS**.
- Participated in distributed development to process user input; provided corresponding feedback based on the scores received from users for sentimental analysis.
- Contributed to open source software using Github; conducted weekly code reviews; designed new components and web interfaces to improve user experience.