Arthur Yang

yarthur@umich.edu • www.linkedin.com/in/arthur-yang-3084b6294 • 248-225-1911 • Ann Arbor, MI

EDUCATION

University of Michigan **Ann Arbor, MI**
Bachelor Science In Engineering In Data Science *May 2025*
GPA: 3.93 / 4.00
Coursework: Data Mining and Statistical Learning, Applied Regression, Machine Learning, Data Structures and Algorithms, Technical Communication for Engineering

Lawrence Technological University **West Bloomfield, MI**
Dual Enrollment Credits for Multivariable Calculus and Differential Equations *June 2022*

SKILLS

Programming Languages: Python, C, C++, R Studio, R, Arena Software, MATLAB, SQL
Data Analysis and Manipulation: Seaborn, Numpy, Pandas, ggplot2, Matplotlib, Sklearn, Tidyverse
Computer Skills: Visual Studio Code, Microsoft Office, Powerpoint, Word, GitHub, Linux, Pdflatex

PROJECT EXPERIENCE

First Aid On Site Foundation of America Intern **Detroit, MI**
Project Manager *May 2023 - August 2023*
- Partnered with hospital administrators and clinicians to identify opportunities for registration process improvements such as centralizing procedures, optimizing worker utilization, and ensuring equitable patient distribution
- Led a student team in coordinating the development of an Arena flowchart that models two hospital registrar systems
- Proposed a successful and more efficient registration process saving $1,000,000 annually in operation costs, in an ideal simulation with optimized workers

Breast Cancer Diagnosis Machine Learning Project **West Bloomfield, MI**
Data Scientist *June 2020 - August 2020*
- Performed a comprehensive principal component analysis using R Studio of a scaled feature matrix containing cell nuclei properties, deriving pivotal insights for the predictors used for the training model
- Implemented and optimized an ensemble machine learning algorithm, achieving outstanding predictive accuracy of 98.3% for classifying tumor types

RESEARCH EXPERIENCE

Spectral Clustering Algorithms and its Applications **Ann Arbor, MI**
Research Assistant *November 2022 - January 2023*
- Conducted in-depth research on various spectral clustering algorithms, delving into their theoretical foundations and practical implementations
- Demonstrated proficiency in applying Laplacian Matrices, Fielder Vectors, and Spectral Gaps for data analysis
- Effectively communicated complex concepts such as Graph Theory, Computer Vision, and Hierarchical Clustering to a team of Graduate Student Instructors and Professors in a clear and concise manner

WORK EXPERIENCE

University of Michigan Math Department **Ann Arbor, MI**
Applied Linear Algebra Grader *January 2023 - Current*
- Coordinated and led grader group responsible for 300 student's grades for an Applied Linear Algebra course
- Collaborated with Professors and Undergraduates to delegate comprehensive rubrics for each project and assignment
- Implemented creative grading strategies and provided constructive feedback to students, fostering a learning environment for academic growth and achievement

ACTIVITIES

Tau Beta Pi Engineering Honor Society *January 2024 – Current*
Michigan Marching Band *August 2022 – Current*