Fied Elahresh

226-506-0358 | elahres1@uwindsor.ca | linkedin.com/in/Fied | github.com/FiedElahreshProjects

EDUCATION

University of Windsor Windsor, ON
B.Sc. Honours Computer Science with Honours Software Engineering Specialization *Expected April 2027*
- Cumulative GPA: 3.96
- Dean's Level Support $10,000 Scholarship

EXPERIENCE

Undergraduate Research Assistant September 2024 – Present
University of Windsor *Windsor, ON*
- Selected as one of the top **80** second-year students, out of the entire class, to participate in the prestigious **Outstanding Scholars Paid Research Program.**
- Focus on finding Correlations between wastewater data and social media trends by analyzing correlations between viral concentrations and social media posts, allowing us to predict outbreaks **6 days prior**.
- Plan to employ tools such as Python, **machine learning algorithms**, and sentiment analysis libraries like **TextBlob** or **VADER** to uncover patterns in public opinion.

Teaching Assistant September 2024 – Present
University of Windsor *Windsor, ON*
- Supported over **50** first-year computer science students in mastering foundational programming concepts and algorithm design, using C.
- Led weekly lab sessions, providing hands-on guidance in solving algorithmic problems and debugging code, which improved student success rates by **15%** in course assignments.
- Collaborated with the professor and a team of 3 teaching assistants to create supplemental materials, improving overall course engagement and student performance.

Software Engineer Intern May 2024 – August 2024
Glendor Inc. *Draper, Utah - Remote*
- Worked among a team assessing state-of-the-art facial recognition models to evaluate defacing algorithms in preserving anonymity in **CT scan** facial data.
- Optimized confusion matrix construction, utilizing **parallel processing** solution leading to a **90%** decrease in processing time.
- Utilized popular statistical analysis and machine learning python libraries such as **Pandas**, **Matplotlib**, **Scikit-learn**, and **NumPy**.

PROJECTS

Interview.Me | *React, TypeScript, Tailwind CSS, Node.js, Express, PostgreSQL* March 2024 – Present
- Developing an AI interview application that allows for users to engage in real-time communication to simulate a live interview environment
- **Front-End**: Built with **React**, **TypeScript**, **Tailwind CSS**, and **ShadCN UI**
- **Back-End**: Designed scalable server infrastructure using **Node.js**, **Express**, and **PostgreSQL**, implementing WebSocket for efficient real-time AI to frontend communication, and used **bcrypt** for password hashing and **JWT** for access tokens.

Safeguarding Medical Data | *Python, NumPy, Pandas, Matplotlib, Scikit-learn* May 2024 – August 2024
- Worked in a team of four to investigate the efficacy of **defacing** techniques in preventing unauthorized facial recognition
- Utilized machine learning concepts and popular libraries like **NumPy**, **Pandas**, **Matplotlib** and **Scikit-learn** to compare and contrast the efficacy of facial recognition algorithms
- Created automation scripts to deface algorithms, achieved a **50%** time reduction by integrating **preprocessing** for detection algorithms.

TECHNICAL SKILLS

Languages: Java, Python, C, SQL (Postgres), JavaScript, HTML/CSS, TypeScript, React, Node.js
Tools: Pandas, Express, Git, MongoDB, NumPy, MatplotLib, NiBabel, GitHub, UNIX CLI