

Zoha Hassan

Morton Grove, IL | (847) 530-0733 | zohahassan10@gmail.com | www.linkedin.com/in/zoha-hassan-6457111b4 | <https://github.com/zohahassan> | US Citizen | Open to Relocate

EDUCATION

Loyola University Chicago

M.S. in Computer Science | GPA: 4.0/4.0

May 2025

- Concentration in Artificial Intelligence

B.S. in Mathematics and Computer Science | GPA: 3.86/4.0

May 2024

Relevant Courses: Data Structures, Computer Systems, Statistics, Discrete Math, Intro to Computer Security, Analysis of Computer Algorithms, Machine Learning, Open Source Computing, Deep Learning, Big Data Analytics, Data Mining
Honors and Awards: Interdisciplinary Honors, Loyola Presidential Scholarship, Rataj Scholarship for Women in Mathematics

PROFESSIONAL EXPERIENCE

Data Analytics Intern

May 2024 - Aug 2024

Elevance Health | Chicago, IL

- Designed, executed, and tested **MDX** queries to extract actionable insights from financial data, contributing to a Proof of Concept (PoC) app for employees to access and understand company financials easily
- Applied prompt engineering techniques to fine-tune **LLM** outputs, enhancing the chatbot's ability to provide accurate and digestible financial information to employees
- Assisted in the deployment of **LLM** solutions for the PoC app, including testing, debugging, and implementation
- Utilized **Pandas DataFrame** to format and structure financial data for the PoC app, ensuring clarity for employees

Software Engineer Intern

Jun 2023 - Aug 2023

Publicis Sapient | Chicago, IL

- Created a full-stack web application PoC catering to marketing employees, resulting in a 25% improvement in user engagement
- Transferred legacy customer segment datasets from **Excel** to **Google's Vertex AI** platform, enhancing data accessibility and processing efficiency
- Engineered a push notification system reliant on customer segment preferences, which could lead to a surge in Return on Investment

Computer Science Student Researcher

Summer 2022

Loyola University Chicago | Chicago, IL

- Developed a functional prototype of a robotic arm designed to streamline domestic recycling sorting processes using **Python** on a **Raspberry Pi** to integrate image processing algorithms to identify and categorize recyclable items on a conveyor belt
- Demonstrated expertise in robotics and automation by programming the robot to accurately detect, pick up, and sort items into designated compartments, optimizing recycling efficiency

Tutoring Program Assistant

Aug 2024 - May 2025

Loyola University Chicago | Chicago, IL

- Provide academic support to university students by communicating with tutoring program leadership, managing organizational logistics, and tracking key dates and tutor availability to ensure efficient program execution

PROJECTS

Sign Language Translation Project ([link](#))

- Achieved **92% test accuracy** classifying American Sign Language letters using a deep learning model (ResNet34) trained on Kaggle datasets.
- Built, optimized, and evaluated the model using **Python, TensorFlow, and Keras**

Data Mining Sleep Analysis Project ([link](#))

- Analyzed the relationship between sleep duration and factors like **caffeine intake, stress, and physical activity** by visualizing and modeling Kaggle datasets

- Applied **dimensionality reduction (PCA, t-SNE, UMAP)** and created bar plots, box plots, and outlier detection using **Seaborn and Matplotlib**

Open Refine Open Source Project ([link](#))

- Enhanced OpenRefine's data cleaning interface by adding a **GREL function to normalize characters**, improving front-end visuals, and implementing a **“Create Column”** feature.
- Contributed bug fixes and conducted UI/UX testing using **Java and JavaScript**

LEADERSHIP EXPERIENCE

Computer Science Mentor & Fellow | Girls Who Code

Jul 2021 - May 2025

- Lead biweekly workshops, teaching **Python** and **HTML** to empower girls to explore careers in technology

Student Member | Association for Women in Mathematics

Sep 2022 - May 2025

- Engage in program initiatives and networking events, and promote mathematics for girls in underrepresented schools

TECHNICAL SKILLS

Programming Languages: Java, Python, SQL, MDX, JavaScript, React.js, HTML/CSS, Linux, MATLAB

Tools/Libraries: Git, Jira, Agile Methodology; Pandas, NumPy, Scikit-learn, Hadoop, Cloudera, Docker, TensorFlow, Keras