

ZADDEEN BENAISSA

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EDUCATION

Northwestern University, Evanston, IL

Master of Science in *Computer Science*

Anticipated December 2022

Bachelor of Science in *Computer Science*

Anticipated June 2022

Kellogg Certificate Program for Undergraduates in *Managerial Analytics*

Cumulative GPA: **3.850/4.000** | Dean's List: 4 of 7 quarters

Relevant Courses: Data Structures and Algorithms, Machine Learning, Human Computer Interaction, Databases, Optimization, Scalable Software Architectures, Introduction to Computer Systems

SKILLS

Programming: CSS, HTML, Java, JavaScript, Python (Advanced)

AMPL, C, C++, C#, MATLAB, Object-Oriented Programming, R (Intermediate)

Software: AWS, Firebase, Git, Microsoft Office Suite (Word, Excel, PowerPoint), NumPy, React, STATA

PROJECTS

Simple Search Engine, Evanston, IL

Programming Language: Java, JavaScript (React)

Winter 2021

- Implemented an ETL search engine in Java and deployed it to AWS where it autonomously crawled the web for news articles, parsed them into HTML documents for storage, and created an API to filter documents by given keywords
- Wrote a React App hosted on an S3 bucket to parse user queries and output relevant matches from the backend

Visualizing Sorting Algorithms, Chicago, IL

Programming Language: JavaScript (React)

Summer 2020

- Created a live React App to visualize 6 popular sorting algorithms in real time along with detailed written descriptions of each algorithm's method and time complexity
- Programmed algorithms and dynamically loaded page in JavaScript, animated sorting through timed CSS changes

Introduction to Human-Computer Interaction, Final Project: Elate, Evanston, IL

Programming Languages: HTML, CSS, JavaScript

Winter 2020

- Collaborated with 3 peers to develop "Elate", a fully-functioning, front-end website to support people suffering from depression or negative thoughts by shifting their focus to positive aspects of daily lives
- Conducted weekly testing to gather real user feedback and incorporate new ideas and features
- Implemented key design principles using HTML and CSS; created interactive site functions using JavaScript

EXPERIENCE

Homebase, Evanston, IL

Software Engineer

September 2020-Present

- Update and maintain a startup real-estate website in TypeScript for over 1000 student users
- Write custom Firebase functions in Python to modify and analyze user data

Northwestern University Industrial Engineering and Management Department, Evanston, IL

Research Intern

March 2020-Present

- Model and improve school districts' transportation systems by utilizing optimization software packages in Python
- Research and develop innovative methods to identify bottlenecks and reduce optimization times by over 50%

QPAY International, Doha, Qatar & Greater Noida, India

Research Intern

July-August 2017

- Evaluated a variety of e-commerce and payment processing solutions; determined the most effective features of each system, enabling developers to focus on these features in future designs
- Documented and optimized each part of the UX and UI for QPAY's existing web solution
- Operated as a liaison between 3 separate teams to facilitate better communication and information sharing

LEADERSHIP

Northwestern Computer Science Department – *Teaching Assistant*

March 2021-Present

Northwestern Engineering Career Development - *Clerical Aide*

February 2020-Present

Northwestern Ultimate Frisbee Team - *Junior Webmaster*

September 2019-Present