Omar Shoura

Boston, MA || Available : Jul - Dec 2023

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Education

Northeastern University, Khoury College of Computer Science - Boston, MA   *Sep 2020 – Present*
Candidate for a Bachelor of Science in Computer Science   *Graduation: Apr 2024*

- ***GPA:* 3.9 / 4.0** - Dean's List
- ***Coursework*:** Artificial Intelligence, Machine Learning I, Software Engineering, Programming Languages, Foundation of Data Science, Object-Oriented Design, Algorithms and Data Structures, Cybersecurity I
- ***Islamic Society of Northeastern [Vice President]*:** Coordinated with board members and other schools to host more than 20 events/year with 200+ attendees within Northeastern and greater Boston Area

Relevant Experience

Capital One – Mclean, VA   *May 2023 – Jul 2023*
[Incoming] Software Engineer Intern (Back End)

Office of Data Science at Liberty Mutual Insurance – Boston, MA.   *Jul 2022 – Dec 2022*
Machine Learning Engineer Coop

- Redesigned an insurance modeling library in python, to reduce memory usage, standardize interfaces by following Sklearn standards, and improve documentation consistency; 12+ engineers use library
- Designed configurable, robust, and well-tested data transformers for underwriting models that sped up deployment from an average of 3 months to only 2 weeks; presented tools to external teams
- Explored new orchestration tool to aggregate 3 models and presented findings; currently deployed and used

Generate: Student led Product Development Studio – Boston, MA   *Dec 2021 – Apr 2022*
Software Engineer

- Built modern user interface for a home screen and explore page in React closely following Figma designs
- Set up authentication process with Django back-end, Spotify user integration, Redux for state management
- Collaborated with 5 engineers to build React and Django based prototype web app in 4 months for customer

Khoury College of Computer Science – Boston, MA   *Sep 2021 – Jun 2022*
Teaching Assistant for Fundamentals of Computer Science 1 and Object-Oriented Design

- Led labs with 30+ students to answer questions and teach Functional Programming & OOD paradigms
- Planned review session with 200+ students attending, working closely with professor to prepare material
- Held office hours to provide one-on-one support, understanding and helping students with unfamiliar code

Technical Skills

Languages	Python, Java, JavaScript, Racket, HTML, CSS, C++, Swift, R, MATLAB
Frameworks	Pandas, NumPy, Sklearn, Tensorflow, Pytest, OpenCV, Node.js, React.js, React Native, JUnit, Redux
Tools	MLflow, Databricks, Datadog, AWS, RESTful API's, Git, SQL, VIM, Bash, XCode, Eclipse, VSCode

Projects (Refer to *GitHub* for more)

Custom Facial Recognition model – *TensorFlow, OpenCV, CNN*   *Dec 2022*

- Engineered and trained a Siamese Convolutional Neural Net to detect if two faces are of the same person following this paper; enables one-shot learning using a tandem embedding architecture into a distance layer
- Built a Streamlit dashboard with a facial segmentation pipeline to determine if I am in the uploaded image

Educational Fintech App – *React Native, Firebase, Figma*   *Apr 2022*

- Designed Figma wireframes to showcase for 20+ screens to demonstrate UI and user interaction
- Created login, profile, and settings screens, integrating with Firebase for content and user management

Predictive Language Analysis – *Python, NumPy, KNN*   *Jan 2022*

- Implemented K-Nearest-Neighbors algorithm using NumPy to classify document through a trigram frequency analysis to place into a trained model of 7 distinct languages considering over 33,000 dimensions