

Professional Profile:

I am currently a Graduate Student pursuing a **Master of Science in Computer Science** at Texas A&M University. I have a **Bachelor of Science in Computer Science**, complemented by minors in **Mathematics** and **Cybersecurity**. I am currently seeking a full-time **Software Engineering** or **Data Science** related opportunity to contribute my knowledge and skills to a team, foster continuous learning and personal growth.

Education and Certifications:

Texas A&M University – College Station

January 2024 – Present

- **Major:** Master of Science, Computer Science

OpenEDG Python Institute:

April 2023 | June 2023

- **PCEP** – Certified Entry-Level Python Programmer | **PCAP** – Certified Associate Python Programmer

Texas A&M University – College Station

August 2018 – December 2022

- **Major:** Bachelor of Science, Computer Science | **Minor:** Cybersecurity, Mathematics

Professional Experience:

Urban Resilience.AI Lab – College Station

August 2022 – December 2022 | January 2024 - Present

- **Data Science Researcher:** Analyzed human activity data, investigating **unique recovery patterns** at a user-level. Used **fine spatial granularity** to capture differential recovery experiences. Determined **homogeneity and heterogeneity** of datasets to understand equitable recovery practices, using **Python** based **Data Science** libraries (**NumPy**, **Matplotlib**, **Seaborn**, **Scikit-Learn**). Journal paper:
 - N. Coleman, T. Kakad, C. Liu, A. Mostafavi, "Homogeneity and Entropy Analysis of Use-Level Recovery to Lifestyles,"

Blackstone Technologies LLC – Remote

February 2023 – August 2023

- **Python Developer:** Coordinate with teams to gather app requirements, write scalable **Python** code, **debug** applications, and integrate user-facing elements using **server-side logic**. Prioritize **client requests**, integrate **data storage** solutions, collaborate with **front-end** developers, and develop tools for **monitoring online traffic**.

Major Projects:

- **Ruby on Rails Web-Application:** A web application built on **Ruby on Rails** framework, including a *sign-in* page for employees and customers, events page, service logger page for employees to register their work hours and a page for customers to keep track of the books they borrowed, read and ones that are to be returned to the library. Used **React.JS**, **Vanilla JavaScript**, and **basic HTML and CSS** for the frontend, and **Ruby on Rails** for the backend.
- **Speed Limit Sign Detector:** A software for autonomous driving vehicles to be able to detect speed limit sign boards. Captured speed limit sign board images using camera. Processed images with machine learning model (**SVM**, **CNN**, and **KNN**). Created test dataset with internet-collected speed limit sign board images. Implemented model with **ROS2 Foxy Fitzroy**.
- **EzFind (tourist guide web application):** Developed a website for holiday destination search. Utilized **React** for frontend and **JavaScript**, **Node.JS**, and **Express.JS** for backend. Provided information on tourist attractions, nearby restaurants, weather report, and NEWS for entered destination.
- **Bayesian Personalized Ranking model:** Designed a program on python Jupyter Notebook using the **NumPy** and **Pandas** library to get a personalized ranking of movies by learning the recall and precision values for the implicit feedback (for about 20 *epochs*) and then finding the *average AUC* for the entire model.

Skills:

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|--------------|-----------------|---------------------|
| • Java | • CSS | • Pandas |
| • Ruby | • CI/CD | • MongoDB |
| • C/C++ | • HTML | • Unix/Linux |
| • React.JS | • Django | • Git/GitHub |
| • Python/R | • Node.JS | • TensorFlow |
| • JavaScript | • Ruby on Rails | • Kubernetes/Docker |