

Alan Uthuppan

Aspiring **AI/ML Engineer** with a strong foundation in data science, machine learning, and software development. Brings hands-on experience in **Python, Pandas, TensorFlow, scikit-learn, SQL, React, etc.** Passionate about creating machine learning models and automating data extraction processes to solve complex, real-world problems. Currently pursuing **AI/ML internships** for Summer 2025.

EDUCATION

DREXEL UNIVERSITY

Graduating June 2026

- Master of Science - **Artificial Intelligence & Machine Learning**

TEMPLE UNIVERSITY

August 2020 - May 2024

- Bachelor of Science - **Computer Science**
- Bachelor of Science - **Data Science (Concentration in Computational Analytics)**
- Minor - **Economics**

TECHNICAL SKILLS

AI/ML:	Pandas, Keras (TensorFlow), scikit-learn, Matplotlib, NumPy, SARIMAX
Programming:	Python, Java, JavaScript, TypeScript, SQL, PHP
Frontend:	ReactJS, Next.js, Tailwind, HTML, CSS
Backend:	PostgreSQL, Oracle, REST APIs, Laravel, Netlify
Tools & Development Practices:	Linux, Git, GitHub, Docker, BeautifulSoup, Agile (Scrum), Atlassian Jira

RELEVANT EXPERIENCE

Research Assistant - Python Development

May 2022 - Present

Temple University | Philadelphia, PA

- **SEC Investment Scrapers** - Implementing automated scraping tools using **Python, BeautifulSoup, and Pandas** for targeted extraction of quarterly investment tables from various SEC EDGAR filings. Transformed unstructured and unpredictable HTML tables into cleaned Excel sheets for streamlined financial analysis, **reducing time needed for analysis by 99.98%**.
- **Extracting and Linking AI Artifacts** - Created ground-truth labels of annotated software mentions in research publications for proposed large-scale framework to aggregate AI workflow components (data, models, tools, methodologies, etc.).

Teaching Assistant

September 2021 - January 2022

Temple University | Philadelphia, PA

- CIS 1068: Program Design and Abstraction - Assisted **teaching** and **grading** Java programming for over **120** students. Translated technical concepts into understandable terms for novice programmers, ensuring alignment with student needs and expectations.

PROJECTS

LSTM Air Quality Predictor

[Python, TensorFlow]

- Developed a Long Short-Term Memory (LSTM) recurrent neural network to forecast PM2.5 and PM10 levels in Philadelphia, aiding public health and policy decisions by predicting air quality fluctuations based on extensive data from the OpenAQ API.

SpreadSight

[Python, AWS S3, Tableau]

- Implemented SARIMAX Time Series Regression and ensemble models to predict and analyze Credit Default Swap (CDS) index valuations, providing educational insights to market dynamics in the North American CDS market via a Tableau dashboard.

LOMO

[ReactJS, Tailwind, Laravel, PostgreSQL, Netlify]

- Contributed to the full lifecycle of LOMO, a web application that facilitates in-person gaming, from requirements gathering and database design, to backend development of user account integration and real-time comments, to frontend development of the UI.

Valorant Discord Bot

[Python]

- Implemented user-focused functionalities such as agent recommendation and account information retrieval through REST APIs.

LEADERSHIP/AWARDS

- **Captain & Advisor:** Broad Street Baadshahz Fusion Dance Team *September 2021 - May 2024*
Led and choreographed for a nationally recognized dance team, honing skills in team coordination, creative thinking, and adaptability to high-pressure, fast-paced environments. **Led team to an 8th overall placing in the country.**
- Temple University **Presidential Full-Ride Scholarship** *\$22,000 Annual Award*
- Temple University **Science Scholar Research Program** *\$4,000 Annual Award*