Aya Tarist

email: ayatarist@gmail.com | Phone: +1 541 787 9650 | Github | Linkedin | Portfolio

EDUCATION

Bachelor Of Science, Bucknell University

Lewisburg - PA, May 2025

Major: Computer Science & Engineering, Minors: Business Analytics

PROGRAMMING & DESIGN

Languages & Tools: Python (Pandas, NumPy), Java, C, JavaScript, SQL, Microsoft Office (Excel, Word, PowerPoint), Jupyter, Gurobi, Jenkins, Oracle Cloud, Linux

Web & UI: React, HTML/CSS, WCAG, Figma, Tableau,, Simio, Scrum/Agile, Atlassian (Jira, Confluence)

EXPERIENCE

Machine Learning Engineer Intern - ORACLE

June 2024 - August 2024

- Expanded data model support from Pandas dataframes to include Pandas series, streamlining user workflows and ensuring seamless data handling without loss of data labels during type conversions.
- Enabled support for custom forecasting models, ensuring that explainability features remained functional.
- Investigated forecasting models by diving into client-reported anomalies, conducting in-depth analysis and testing on outputs.

Accessibility Consultant & Research Fellow - MOZILLA, Bucknell University

May 2023 - May 2024

- Spearheaded a community-wide digital accessibility initiative by conducting in-depth WCAG compliance evaluations for over 15 local businesses.
- Collaborated with university developers to redesign the Digital Scholarship Bucknell platform, implementing inclusive design principles that improved navigation for screen reader users by 65%.
- Led an assistive technology workshop for Lewisburg School District educators, demonstrating hands-on techniques for customizing educational materials to improve learning accessibility for students with diverse needs.

Software Engineering Intern - RENAULT

May 2022 - July 2022

- Gained practical insight into Agile, Lean IT, and Scrum methodologies within enterprise software development
- Acquired foundational technical skills in Cloud infrastructure, and application delivery optimization through dedicated workshops.

Leadership Intern - Office of the Dean, College of Engineering

Sept 2022 - May 2023

- Spearheaded student feedback initiatives (interviews, surveys, town halls) to identify crucial insights.
- Communicated data-driven recommendations to department leadership, effectively strengthening student-faculty communication channels.

PROJECTS

Pennsylvania Native Tree Selector | React · React Router · Tailwind CSS · PWA

- Developed full-stack React web application with dynamic filtering, transforming legacy Excel spreadsheet into interactive tool.
- Implemented state management using React Hooks, enabling complex tree species filtering across multiple parameters.
- Designed responsive UI with Tailwind CSS, supporting dynamic geolocation and USDA hardiness zone recommendations.

Predictive Modeling of Formula 1 Driver Rankings | Python · Machine Learning · Jupyter

- Preprocessed and cleaned racing data from the Ergast API (2009-2022) using Pandas, handling missing values and feature engineering.
- Built and tuned Logistic Regression, Decision Tree, and Random Forest models to predict driver rankings, achieving 85% accuracy.

Northeastern Accessibility Hackathon | Figma · HTML · CSS · WCAG

- Developed a Figma plugin to automate accessibility evaluation of design components (color contrast, alt text, keyboard focus).
- Implemented in-canvas highlighting functionality to enable designers to proactively identify and rectify WCAG compliance gaps.

LEADERSHIP & AWARDS

Class Representative - Society of Women Engineers

Founder and President - Middle Eastern North African Student Association

January 2022 - May 2023

French Teaching Assistant

Telectricacturing Assistant

September 2022 - May 2023

January 2024 - December 2024

Michael M. & Lillian Amber Fremont Scholar - Grace Hopper Scholar '24 - Society of Women Engineers Scholar '24 Dean's List '22 '23 '24

LANGUAGES

English | French | Arabic