# **FARAH ABDI**

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## **EDUCATION**

# **The Ohio State University**

Columbus, OH

Bachelors of Science in Computer Science & Engineering

May 2028 (Expected)

• Cumulative GPA: 3.9/4.0

#### **TECHNICAL SKILLS**

Languages: Python, Java, C#, JavaScript, HTML5, CSS3, SQL, TypeScript

Frameworks: React, React Native, Expo, Node.js, MongoDB, TailwindCSS, Flask, Express.js, Django

Libraries: TensorFlow, Pandas, NumPy, Matplotlib, SKlearn, Seaborn, PyTorch, Keras

Developer Tools: Docker, Visual Studio, PyCharm, IntelliJ, Git, VS Code, Figma, Postman, ChatGPT, AWS

#### **EXPERIENCE**

## **Software Engineer Intern** | FILLER INFO UNTIL INTERNSHIP IS COMPLETE

May 2025 – August 2025

Columbus, OH

True Interpretation and Consultation Services LLC

- FILLER INFO Internship Not Completed
- FILLER INFO Internship Not Completed
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## **PROJECTS**

## **Solar Power Output Predictor** | Python, Scikit-learn, XGBoost, LightGBM

Feb 2025 – Apr 2025

- Engineered a full-stack machine learning pipeline to predict solar irradiance (GHI), processing 450,000+ rows of data.
- Automated data ingestion from 2+ APIs (NREL, OpenMeteo), merging, cleaning, feature engineering, outlier handling.
- Trained and evaluated 10+ regression models, achieving 91.3% prediction accuracy within 2 STD bands.
- Deployed robust error analysis using custom metrics, improving forecast reliability for GHI estimations by 25%.

# **2K Scout** | React, TailwindCSS, Web-Scraping, Sqlite | Live App

Nov 2024 – Dec 2024

- Built a fantasy basketball tool featuring **500**-player data across **5** positions for team-building.
- Integrated interactive UI elements, allowing users to add, remove, and undo actions with instant updates.
- Developed backend scraping scripts to extract and organize NBA 2K25 stats, automating 100% of data updates.
- Optimized app, enabling seamless resets, intuitive player management, and responsive performance across all devices.

## **Pathfinding Visualizer** | *Python, Git, Pygame*

Sep 2024 - Oct 2024

- Developed a pathfinding visualizer using Python and Pygame to showcase algorithms like A\*, Dijkstra, and BFS.
- Built an interactive grid-type UI allowing users to place 50+ obstacles and observe real-time algorithm execution.
- Optimized visual rendering for smooth animations, achieving frame rates of 60 FPS during complex simulations.
- Versioned and managed code with Git, enabling 100% seamless collaboration and change tracking

## **Sparkx Chat** | *JWT*, *React*, *Expo*, *MongoDB* | Live App

Jun 2024 - Sep 2024

- Developed cross-platform (React/Expo) chat app on MERN, supporting 2 platforms; reduced deployment time by 20%.
- Enabled <100ms real-time messaging with WebSockets (Socket.io), improving user engagement by 30%.
- Secured user data with 99.9% reliability using JWT authentication.
- Optimized React/Expo UI, achieving 30% faster load times and 25% smoother responsiveness.

#### LEADERSHIP

## **Arabic Teacher**

May 2021 – July 2025

Masjid Ibn Taymiyah and Islamic Center Columbus, OH

- Designed and taught Arabic language curriculum to students of varying ages, creating an engaging learning environment.
- Managed classroom activities, assessed student progress, and provided individualized support for up to 80 students total.
- Mentored and guided students in their learning path, promoting cultural understanding and communication skills.