

Yahya Abovat

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EDUCATION

University of Central Florida

Orlando, Florida

Bachelor of Science in Computer Science

Fall 2024

Relevant Courses:

Data Structures and Algorithms, Discrete Structures, Algorithms for Machine Learning, Assembly Programming, Object Oriented Programming, Procedural Programming, Cybersecurity, Differential and Integral Calculus

EXPERIENCE

Developer - Senior Capstone Project

June 2024 – December 2024

Family Resource Center at the Nemours Children's Hospital

- Collaborated with a team to build a web application to streamline access to healthcare and community resources for underprivileged families, using the MERN stack (MongoDB, Express.js, React JS, Node.js).
- Created search functionality with advanced features like keyword filtering, synonym detection, and predictive text that filters over 500+ resources by keywords, categories, and location, improving search efficiency by 70%.
- Developed a bulk brochure generator that pulls resource data from the backend, auto-generates QR codes, and batch-produces brochures for selected resources, reducing manual work for volunteers by 80%.
- Implemented secure token-based authentication using JSON Web Tokens (JWT) to manage user sessions and ensure protected access to administrative features.

PROJECTS

Morning Brief Telegram Bot | AWS Lambda, Python, OpenAi API, National Weather API, Google Maps API

- Developed a Telegram bot that delivers personalized morning updates, including current weather conditions, estimated commute times, and AI-generated inspirational quotes.
- Deployed the application on AWS Lambda to ensure a serverless, scalable, and cost-effective solution.
- Automated daily updates by integrating AWS EventBridge for scheduled triggers at specific times.

Battleship Game Application | React Native, Expo Go, Express/Node.js, MongoDB, Ngrok

- Developed a full-stack cross-platform mobile game using React Native with Expo for Android and iOS.
- Implemented UI elements and game logic for ship placement, firing mechanics, and AI opponent behavior with different difficulty levels, ensuring an engaging gameplay experience.
- Created RESTful API endpoints and utilized Express/Node.js to handle user authentication and leaderboard data retrieval from a MongoDB database.

Gas Price Predictor | Google Cloud (BigQuery, Cloud Functions, Cloud Scheduler), Python, LSTM

- Built an automated pipeline using Google Cloud Functions and BigQuery to collect and preprocess gas prices and external features (crude oil prices, weather, holidays).
- Developed and trained Long Short-Term Memory (LSTM) time-series models to accurately predict daily gas prices 7 days in advance.
- Implemented scalable, scheduled prediction workflows using Cloud Scheduler to automate weekly forecasting.

TECHNICAL SKILLS

Frameworks: Node.js, React JS, WordPress

Languages: C, CSS, HTML, Java, JavaScript, jQuery, TypeScript, Python

Libraries: Matplotlib, pandas, Scikit-learn (sklearn): MinMaxScaler, LabelEncoder, PyTorch: torch.nn, torchvision

Developer Tools: AWS, Cloudflare, Figma, Git, Google Cloud, Jira, Microsoft Azure, Ngrok, Selenium

Security & Analytics Tools: Splunk, Wazuh