

Sanaa Blankenbaker

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EDUCATION

University of Central Florida
Bachelor of Science in Computer Science

Orlando, FL
May 2019 – Dec 2023

EXPERIENCE

Remote Pilot in Command/Data Manager
Alt Spec UAS

Aug 2024 – Present
Maui County, Hawaii

- Conducted aerial utility inspections for Hawaiian Electric using an unmanned aerial system (UAS) to capture high-resolution images of power lines, assess infrastructure integrity, and identify potential safety hazards, improving maintenance efficiency and hazard mitigation.
- Accrued over 70+ hours in total drone flight time with DJI Mavic 3 Pro, totaling to over 100 successful flights.
- Implemented a standard system of data management, creating backups of over 4TB worth of photograph and flight log files.
- Collected, analyzed, and interpreted operational data using Microsoft Excel to identify trends and support data-driven decision-making for improved efficiency and safety.
- Led efforts in organizing photographic data, ensuring all images were properly assigned to assets within the Sharper Shape CORE application, improving data accessibility for client use.

Software Engineer (*Project Mercury*)
NSIN

Jan 2023 – Dec 2023
Remote

- Improved user experience of existing application by stream-lining JavaScript code and creating solutions 50+ bugs.
- Collaborated with frontend team to iteratively design responsive mobile and web user interfaces (UI) using Figma, HTML/CSS, and React/React Native, prioritizing accessibility through dark mode and high color contrast.
- Collaborated with backend team to facilitate the migration NoSQL database functionality to PostgreSQL, ensuring the application can efficiently handle the load of thousands of daily users.
- Leveraged AWS services such as Python-based Lambda, API Gateway and RDS to create optimized SQL queries for REST API endpoints, resulting in a 25% decrease in latency which improved application responsiveness.
- Published Android application to the Google Play Store over 10 times throughout development, utilizing Object-Oriented Java and Android Studio to ensure seamless functionality, performance optimization, and successful releases.
- Coordinated project tasks through Agile methodology, used Jira for bi-weekly sprints and hosted extensive documentation on Confluence, ensuring a smooth onboarding process for junior developers.

PROJECTS

MERN Stack Project (*Hush UCF*)

Oct 2022 – Dec 2022

- Employed the use of JavaScript and MongoDB to create a NoSQL backend, writing 18 CRUD-based API endpoints to demonstrate knowledge of API development best practices.
- Coordinated meetings between 3 separate teams and facilitated full group understanding of API functionality.
- Demonstrated strong problem-solving skills by diagnosing and fixing bugs, ensuring seamless functionality and robust performance by identifying root causes and implementing quality solutions.
- Established the creation of all API documentation on SwaggerHub, ensuring clarity; enhanced developer experience by providing detailed documentation leading to a 40% reduction in integration time.
- Delivered compelling project presentation to an audience of 200 students, receiving outstanding feedback for clarity, engagement, and impactful communication.

SKILLS

Programming Languages: Java, Python, C / C++, C#, SQL, PostgreSQL, JavaScript, HTML/CSS, MongoDB, WebGL, GLSL

Frameworks: React, Node.js, Material-UI

Developer Tools: Git, VS Code, Visual Studio, IntelliJ, Eclipse, Unity Engine, Figma, Canva, Postman, Microsoft Excel, Microsoft PowerPoint, Microsoft Word, VirtualBox, PuTTY, AWS, Heroku, SwaggerHub, Android Studio, Google Play Console, Linux/Ubuntu, Gradle

Languages: English (Fluent), Japanese (Intermediate)