David Ulloa

linkedin.com/in/david-a-ulloa, github.com/DavidUlloa6310

dulloa6310@gmail.com
dulloa.com

Education

Florida International University, Miami, FL AUG 2022 – MAY 2025

B.S. in Computer Science, GPA: 3.92 / 4.0

Data Structures, Discrete Structures, Systems Programming, Computer Architecture, Graduate Operating Systems

Experience

Microsoft Explore Intern @ Bing MAY 2023 – AUG 2023

- Used **SQL**-like language for data analytics of big data to decide coverage of a Bing Explorational Search Box, settling on **1% of Bing traffic – 1 million daily users**.
- Studied and implemented **prompt engineering** for the generation of content used in a Bing Explorational Search Box, then made change with **C# framework** so results can be passed to the frontend UX teams.

Director of Technology, INIT FIU DEC 2022 – PRESENT

- Lead development of shellhacks.net to orchestrate ShellHacks 2023 (**Largest Hackathon on East Coast, 1300 hackers**) to manage user registrations, signups, acceptances, and dashboards for admins / hackers. Built using **Next.JS**, **TypeScript** and **Tailwind**.
- Used **Docker** and **AWS** to create **PostgreSQL** and **S3 databases** for resume and applicant information and used **AWS SDK** to communicate with AWS Simple Emailing System for sending acceptance / reminder emails.

Projects

CodeHints OCT 2023

- Designed and implemented a LeetCode-like interface to allow users to practice with 300+ interview problems.
- Used **LangChain** to generate user-specific learning advice and graph-like visual aid by leveraging the **GPT-4** API and user's code results as context.

Story Blitz MAR 2023

- Engineered Story Blitz for the **Hackabull 2023 hackathon**, with over 200 attendees, winning **1st place for the Monic.AI challenge and 2nd place overall**.
- Using **Next.JS**, **Node.JS**, and **OpenAI API**, StoryBlitz creates educational story RPGs which users interact with to practice medical subjects. If users answer incorrectly, the consequences to the story are explained.

SocialFly SEP 2022

- Assembled and directed a frontend application for ShellHacks 2022 (**690 participants**) using **Next.JS**, **Tailwind**, and **Graph.JS**, to display Twitter data based on search query.
- Trained and integrated a **TensorFlow** NLP neural network for sentiment analysis on Twitter tweets using Kaggle dataset, **Pandas**, and **NumPy** with a **validation accuracy of 93%**.

Skills and Languages

- Python w/ Pandas, NumPy, TensorFlow, SciKit-Learn
- Java, C#
- Javascript, TypeScript, NoSQL, SQL (backend)
- React.JS, Next.JS (frontend)
- Microsoft Azure Fundamentals Cert.