Diego A. Taveras Rivera

dataveras.net | diegoat2@illinois.edu | Github: diegotaveras

EDUCATION

University of Illinois at Urbana-Champaign   Graduation Date: May 2025
Bachelor of Science in Computer Science   GPA:3.68/4.00
Relevant coursework: Data Structures, Computer Architecture, Software Design, Linear Algebra, Intro to Computer Science I (Honors) and II, Discrete Structures, Multivariable Calculus, Physics: Elec & Mag

Harvard University
Introduction to Computer Science using Python CSCI S-7

HONORS

Dean's List	Fall & Spring 2022
Computer Science Visionary Scholarship	2021-2025
James Scholar of Grainger Engineering	Spring 2022
Presidential Scholars Program Candidate	2021
Hispanic Scholarship Fund - HSF Scholar	2021

EXPERIENCE

Programming/Software Developer   May-Aug 2023
Information Trust Institute

- Used various Python libraries to develop a GUI that streamlines OT-network security policy creation and validation. Enabling users to easily customize parameters and upload their created policies to a shared JSON library.
- Presented the app to company members and produced detailed documentation on features and usage.
- Expanded the GUI features with an Angular web application and experimented with web-based collaboration for users.

Course Assistant in Introductory Computer Science Course (CS124)   Spring 2022
University of Illinois

- Teach fundamental topics in Java and Kotlin through virtual office hours and course forum.
- Develop recorded audiovisual code walkthroughs to teach students in both programming languages.
- Help students with Android development machine projects in Android Studio.

PROJECTS

Spotify Playlist Analyzer (Java Spring Boot, React.js, AWS) [Live at dataveras.net/projects]

- Created a web application that utilizes Spotify Web API to provide users with the audio features of their own playlists and individual songs.
- Developed a Spring Boot REST API which conducts OAuth2 authorized calls to Spotify Web API.
- Created, managed, and tested this API using AWS Lambda, API Gateway, and AWS SAM, allowing for efficient and cost-effective deployment and hosting. Implemented secure management of admin secrets with AWS Secrets Manager. Created DynamoDB (NoSQL) database to store user session information.

"WeRent" Hackillinois 2023 (React.js, MongoDB)

- Created a web application that consumes APIs of product data and displays it to the user.
- Implemented search functionality with tunable search parameters.
- Enabled user login features and profile data storage using MongoDB.

ARC Capacity Viewer (Django, React.js, MySQL)

- Django development of views, data models, and app encapsulation.
- Leveraged REST APIs for effective data transfer between frontend and backend components.
- MySQL for modeling capacity data for live capacity feeds for sections of UIUC's ARC facility.

Reddit Visualizer (C++, Catch2)

- Parsed large dataset to be modeled as a graph data structure.
- Implemented graph algorithms to find the shortest path between reddit posts through hyperlinks.
- Used graph visualization to display the relationships in centrality (betweenness, closeness) within posts.

SKILLS

Technical

- Programming Languages: C++, Python, Java, SQL, Kotlin, UNIX, HTML
- Tools/Frameworks: React.js, Git, Docker, AWS, Django, Angular, Android, MongoDB, Tkinter, NumPy
- Other: Bilingual (English/Spanish), music theory, nutrition and fitness