Audric Serador

J 630-345-2990 ■ audricciel@gmail.com III linkedin.com/in/audricserador/

github.com/AudricSerador

Education

University of Illinois at Urbana-Champaign

Expected May 2026

B.S. Computer Science (GPA: 3.95 / 4.00)

Urbana, IL

• Relevant Coursework: Data Structures (C++), Software Design Lab, Prob & Stat in CS (Python), Discrete Structures, Intro to CS II (C++), Linear Algebra w/Computational Applications (Python), Foundations of Leadership

Experience

PURE (Promoting Undergraduate Research in Engineering)

Sep 2023 - Present

Research Software Developer

Urbana, IL

- Investigating the dynamics and behaviors of contagion in social media through simulations on a custom-built Twitter clone, built on Next.js and written in TypeScript to be deployed to 500+ participants for data gathering.
- Deployed a robust authentication system leveraging Firebase and React, employing custom hooks and effective state management integrated with a login page styled using Tailwind customization classes.
- Integrated interactive data visualizations using **React** and **D3.js**, empowering researchers to identify data trends.

VoyagerNetz

July 2022 - May 2023

Software Engineer Intern

St. Charles, IL

- Leveraged NLTK and SpaCy libraries to engineer an intent recognition system using tokenization and POS tagging NLP techniques, successfully matching and recognizing keywords with approximately 70% accuracy.
- Rearchitechted codebase for modularity via object-oriented refactoring, reducing code redundancy by 30%.
- Engineered a JSON-based data framework, streamlining user data imports and exports across all platforms.

Projects

Campus Dining App | Next.js, TypeScript, React, Tailwind, AWS, PostgreSQL, Supabase, Prisma, Python, Selenium, Vercel

- Scraped 1000+ data points from university dining hall websites using the Selenium library, pushed to a PostgreSQL database using AWS Lambda with CloudWatch for up-to-date food serving info and nutrition-informed food data.
- Launched a Next.js web app deployed on Vercel, utilizing RESTful API principles to deliver real-time dining hall times and personalized meal recommendations powered by **Supabase** for quick data access and user authentication.
- Designed a mobile-responsive UI using React and Tailwind, optimizing frontend database queries using Prisma.

News Article Classification | Python, SpaCy, TextBlob, Jupyter Notebooks, Pandas, Transformers, Bokeh, Flask, React

- Leveraged NLP (POS tagging, NER, sentiment analysis) to analyze bias/opinion of public figures across 1 million news articles, transitioning from SpaCy/TextBlob to BERT-base/RoBERTa models for 15% improved accuracy.
- Built an interactive full-stack website using Flask and React, providing visual insights on media bias across public figures and news organizations using the **Bokeh** library through line graph and bar chart data visualizations.

ClubMaster | Python, Flask, Jinja2, Firebase, Bootstrap

- Developed a social networking web app modernizing school-club management for students, teachers, and administrators, built on Flask with Jinja2 and styled using the Bootstrap framework, winning 2nd at STDL Hacks.
- Established secure sign-in/up with Firebase Authentication and empowered tailored interactions through realtime database access using Cloud Firestore to write and access user data.

Discord Game Bot | Python, MySQL, Discord API, phpMyAdmin

- Created and deployed an interactive Discord role-playing game bot in Python built using the Discord API, enabling 150+ users to create, customize, upgrade, and battle other user-made entities featuring over 30 custom commands.
- Utilized MySQL to implement a robust and scalable database for the Discord bot storing over 1000 user profiles, entity information, and in-game items, using phpMyAdmin for data management and retrieval during gameplay.

Technical Skills

Languages: Python, TypeScript, JavaScript, HTML/CSS, C++, C#, Java, Rust, SQL

Technologies: Next.js, Node.js, React.js, AWS, Bootstrap, Tailwind, Flask, SpaCy, NumPy, Pandas, Transformers,

PostgreSQL, MySQL, Selenium, Git, Firebase, Docker, Vercel, Supabase, phpMyAdmin, phpPgAdmin

Concepts: Software Engineering, Machine Learning, Natural Language Processing, Human Computer Interaction, Agile Methodologies, DevOps, Frontend, Backend, UI/UX Design, Human Computer Interaction, Data Science, Data Analysis