# Rishaan Kumar

rakumar2@wisc.edu• (608)-960-0203 • linkedin.com/in/rishaan-kumar • github.com/rishaan-k • rishaan.tech

## EDUCATION

- **University of Wisconsin-Madison**                                                                      Madison, WI
  **B.S. Computer Science + B.S. Communication Arts** (Radio–TV–Film)                      *August 2022 - May 2026*
  - **GPA:** 3.88/4.00
  - **Courses:** Data Structures and Algorithms, Artificial Intelligence, Operating Systems, Computer Organization, User Interfaces, Object Oriented Programming, Data Visualization, Linear Algebra, Calculus, Discrete Math.

## EXPERIENCE

- **DuploCloud**                                                                                           San Jose, CA
  *Software Engineer Intern*                                                                    *May 2024 - August 2024*
  - Developed an automated newsletter that integrated the **SalesForce, Domo, and internal APIs** to create distinct visualizations using **seaborn** and **matplotlib** and unique insights tailored to each customer's AWS data. Actively being used for customer acquisition.
  - Created a **RESTful Flask API** that helped customers compare costs of competitors and returned a customized spreadsheet using **Pandas**. Helped customers **save up to 50%** of their monthly bill.
  - Redesigned an Automated Documentation Bot that used the **Slack API** to analyze conversations with **Claude 3.5 Sonnet** to automatically update the public documentation. Currently improving DuploCloud's documentation every day.
  - Developed a **Zoom Mining tool** that took Zoom recordings and created minutes of the meeting in **markdown**. Implemented **OpenAI's Whisper** for speech recognition. Currently used to summarize weekly internal meetings.
  - Every project is deployed on DuploCloud's internal network using **Docker**.

## HIGHLIGHTED PROJECTS

- **TrackTheSpot** - *User-Centric Spotify Data Visualization App*
  - Developed a functional web application that tracks users' Spotify data to give them a report of their top artists and songs during different time frames.
  - Integrated the **Spotify API** in **ReactJS** (**TypeScript, HTML, Bootstrap**) to authenticate account information and retrieve personalized song and artist data before processing the information using **JSON parsing algorithms.**
  - Utilized **OpenAI's ChatGPT API** to give personalized recommendations by using the users' recent listening history as the data set for the LLM.

- **Lake Mendota Ice Analysis** - *Predictive Climate Modeling Using Linear Regression*
  - Built a **Python-based machine learning pipeline** to analyze over 150 years of historical climate data, predicting ice coverage on Lake Mendota.
  - Preprocessed datasets to improve **linear regression** model accuracy, optimizing **gradient descent** performance.
  - Achieved predictions **within 0.01** of the closed-form solution and visualized trends and insights with **Matplotlib**.

- **Covid-O-Grapher** - *Real-Time Worldwide COVID-19 Stat Dashboard*
  - Implemented a front-end dashboard using **ReactJS** (**JavaScript, HTML, CSS**), and the **disease.sh API** to retrieve data and calculate statistics like New Cases, Total Cases and Total Deaths for each country.
  - Used **Charts.js** that let users interactively view and toggle data visualizations.

- **Python-Protect** - *Cipher-Based Password Manager*
  - Developed a **Password Manager** using **Python** that uses a cipher to encrypt passwords to avoid plain text storage.
  - Encrypted passwords were stored in a **CSV file** formatted for maximum efficiency.
  - Enhanced user cybersecurity by providing a secure and convenient solution for centralizing the storage of various online accounts.

## LEADERSHIP

- **WSUM 91.7FM**                                                                                         Madison, WI
  *Radio Show Host*                                                                            *January 2023 – Present*
  - Hosts a weekly radio show during prime time on FM that averages **over 5,000 monthly listeners**.
  - Worked with university departments and student organizations to secure guest speakers.
  - Introduced live audience call segments, contributing to a **70% growth** in interaction and community engagement.

## SKILLS

**Languages:** Python, Java, C, JavaScript, Bash, HTML/CSS, SQL, TypeScript
**Frameworks:** ReactJS, React Native, Flask, Pandas, Selenium, Matplotlib, PyTorch, AWS SDK (Boto3), Node.js, Bootstrap
**Tools:** Git, Linux, Docker, JUnit, Postman