RIT AGARWAL

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EDUCATION

University of California, Los Angeles (UCLA)
Bachelor of Science - Computer Science, Minor in Mathematics   Expected June 2025

EXPERIENCE

Tatari | Software Engineering Intern   June 2024 – Present
- Designed a custom linter to pre-emptively stop error-prone commits, significantly improving code quality and reducing deployment issues.
- Optimized data storage, resulting in a 14-Gb reduction and saving the company $1500 and approximately a week's worth of work.
- Manufactured an hourly Airflow monitoring system to ensure critical jobs run on schedule, enhancing reliability and efficiency.
- Researched and implemented log ingestion using Terraform, AWS, Databricks, Docker and Grafana to be used by the team every day
- Flagged unusual data storage saving the company over $10,000

Bruin Spacecraft Group | President   June 2024 – Present
- Managing all 4 portions of the club responsible for over 100 student members
- Collaborating with project leads to apply and win the NASA CubeSat Launch Initiative.
- Developing a comprehensive curriculum for our introductory lecture series and project for the growth of the UCLA community
- Creating marketing techniques to increase membership and member retention during presidential term

Bruin Sports Analytics | Full Stack Web Developer   Jan 2024 – Present
- Created a user-friendly Web App to improve analytic capabilities for the UCLA Men's Tennis Team using React.js
- Developed a dynamic scoreboard feature, seamlessly integrated with an embedded Youtube Player to view score along video
- Led redesign of page to make it more user friendly by replacing a static PDF with a dynamically styled python script
- Single handedly implemented sign in feature and authentication system using Firebase to protect sensitive team data

Bruin Spacecraft Group | External Vice President   June 2023 – June 2024
- Managing a team of 12 for external affairs, overseeing corporate funding, UCLA events and School Outreach events
- Established 7 events, 1 industry advisor and 3 companies for payload, hardware integration and testing collaborations
- Garnered $10000 in funding and working towards over $130,000 in testing sponsorship

Pullscription LLC | Software Engineering Intern   June 2023 – Sept 2023
- Enhanced and debugged Python and MySQL data integration processes, reducing overall processing time by 60% and minimizing downtime
- Implemented a system for easier database access, facilitating creation of a user-friendly interface by frontend team using API's
- Spearheaded the development of a system to log detailed errors in real-time, reducing response times during outages by 80%

Bruin Spacecraft Group | Web Master   Oct 2022 – Sept 2023
- Managed 4 people for development and pipeline of club website, ensuring a more modern and user-friendly online presence
- Redesigned pages with updated information and styling, resulting in a 25% increase in new member acquisition through website

TECHNICAL SKILLS

- Programming Languages – Python, JavaScript, C++, SQL, C, Verilog, Java, OCaml, Prolog, Scheme, Terraform
- Frameworks – Numpy, Unittest, Node.js, FastAPI, Next.js, React.js, Docker, TypeScript, Django, Databricks, Airflow, YFinance, Plotly
- Databases – Firebase, MySQL, AWS

PROJECTS

Finance Dashboard | https://github.com/ritzz26/DS_YF_Dashboard
- Created a financial data analysis dashboard using Python, incorporating real-time data fetching with yfinance, matplotlib and plotly.
- Implemented statistical analysis to evaluate stock performance, enhancing user insights through an intuitive interface.

HitchHiker | https://github.com/ritzz26/hitchhiker
- Developed a cutting-edge application empowering tourists to plan their future trips intelligently using Typescript and OpenAI API
- Established a Firebase Database for storing and displaying previous trips allowing users to explore trip options with different filters
- Implemented a user-friendly login page with Google Authorization and Email/Password options enhancing the accessibility and security

SoccerBros | https://github.com/ritzz26/soccor_bros
- Crafted an immersive 3D penalty shootout game catering to excitement of soccer enthusiasts using JavaScript
- Engineered key features, including collision detection and scoring algorithms, scale designs, player aim guides, and 3D billboards

Monopoly | https://github.com/ritzz26/Monopoloy_Python
- Developed a Python application simulating the Monopoly game, utilizing OOP principles to model players, properties, and game events.
- Implemented core game mechanics such as property trading, rent calculation, and chance/community chest cards.