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 – Sept 2024
- Designed and implemented a complex log ingestion pipeline on **Kubernetes** using **Terraform, AWS, Docker** and **Grafana** for monitoring and analysis of 20GB per day of **Databricks** job logs with Grafana dashboard and filtering.
- Implemented a custom linter using **YAML** to pre-emptively stop 100% error-prone commits and improving code quality
- Optimized **AWS S3** storage using **Terraform** lifecycles and intelligent teardown, deleting over 60TB and saving over $20,000
- Manufactured an **Airflow** monitoring and notification system using **Datadog** and **Terraform** to ensure critical jobs run hourly

Bruin Sports Analytics | Full Stack Web Developer   Jan 2024 – Present
- Created a user-friendly **React.js** Web App to improve analytic capabilities for the UCLA Men's Tennis Team
- Developed a dynamic scoreboard feature by integrating Data with the **Youtube Player API**, allowing players to always view the score
- Dynamically replaced a static pdf report with the **Python** Script creating the report
- Implemented a **Firebase** email and password sign in feature and authentication system to protect sensitive team data

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

Bruin Spacecraft Group | President   June 2024 – Present
- Managed all 4 portions of the club responsible for over 150 student members
- Collaborated with project leads to apply and win the NASA CubeSat Launch Initiative.
- Developed a comprehensive curriculum for our introductory lecture series and project for the growth of the UCLA community
- Created marketing techniques to increase membership and member retention during presidential term
- Led budgeting, fundraising (corporate and crowdsourced), and purchasing initiatives
- Collaborated with Executive Board to create refined documentation and internal processes

Bruin Spacecraft Group | External Vice President   June 2023 – June 2024
- Managed 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 $60,000 in testing sponsorship

TECHNICAL SKILLS

- Programming Languages – *Proficient:* Python(3+ yrs) JavaScript (3 yrs) C++ (3 yrs) *Beginner:* Java (1 yrs)
- Frameworks and Software – Kubernetes, Docker, Node.js, FastAPI, React.js, Django, Airflow, Databricks, TensorFlow, Git, Linux, AWS
- Databases – Firebase, MySQL, AWS S3, MongoDB

PROJECTS

HitchHiker | https://github.com/ritzz26/hitchhiker
- Utilized **Typescript** and **OpenAI API** to create a cutting-edge application empowering tourists to plan their future trips intelligently
- 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 using **Google OAuth** with Google Authorization and Email/Password options to enhance security

Packwell Demo | https://github.com/ritzz26/Packwell_Dev
- Designed and published a demo website for Packwell Zimbabwe using **HTML**, **CSS** and **JavaScript** based on a pdf brochure.
- Hosted the site on **Firebase** for public viewing and researched DNS configurations for the company.

SoccerBros | https://github.com/ritzz26/soccor_bros
- Crafted an immersive 3D penalty shootout game using **JavaScript** catered to excitement of soccer enthusiasts
- 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.

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.