

# RIT AGARWAL

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## EDUCATION

### University of California, Los Angeles (UCLA)

Bachelor of Science - Computer Science, Minor in Mathematics

Awards – Gerald and Thelma Merit Scholarship Awardee 2024/2025

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

- Developed a dynamic Tennis Scoreboard feature by integrating Data with the **Youtube Player API**
- 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
- Debugged issues after a major change in **JSON** Schema introduced major bugs within the app

### 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

- Collaborated with project leads and external advisors to apply for the NASA CubeSat Launch Initiative.
- Guided efforts to successfully collaborate with the UCLA Space Institute for support and funding
- 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, documentation and internal process initiatives

### 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

### 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 – 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](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/soccer\\_bros](https://github.com/ritzz26/soccer_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](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.