

Ritvik Varkhedkar

919-491-1855 | Ritvikv20@gmail.com | <https://www.linkedin.com/in/ritvik-varkhedkar-68aa01223/> | <https://rvark2002.github.io/>

SUMMARY

Software Engineer with experience in full-stack development, data science, cloud-native architecture, and automated testing. Proficient in Java, Spring Boot, Python, and NodeJS. Strong interest in machine learning, data structures, automation, and building scalable, impactful systems that solve real-world problems.

TECHNICAL SKILLS

Languages: Python, Java, C, C#, Terraform, Ruby, OCaml, Kotlin, Rust

Data Science: Jupyter Notebook, Pandas, TensorFlow, Scikit-Learn, Keras, AWS Rekognition,

Tools: Linux, Jenkins, Agile (Jira), Git, Docker, Unity, Android Studio, Selenium, Playwright, Unix, Bash, Postman

Front-End: JavaScript, TypeScript, Node.js, React, Express, HTML+CSS

Back-End: Spring Boot, Cucumber, Mockito, MongoDB, Kafka, JUnit, AWS Lambda, SQL, Google Cloud, OpenShift

EXPERIENCE

Software Engineer

January 2024 – Present

Freddie Mac

McLean, VA

- Contributed to the development of an automated tool for generating XML to JSON schema transformations across 10 microservices
- Modernized 6 legacy applications into cloud-native, web-based platforms using Java, Spring Boot, Kafka, and Agile methodologies to enhance loan origination and tracking capabilities
- Automated over 500 tests with Cucumber, Mockito and JUnit to ensure robust code quality
- Employed infrastructure technologies - Jenkins, OpenShift, Kibana, Git, Jira, Oracle Enterprise Manager - to streamline deployment
- Designed and implemented an end-to-end pipeline that ingested loan files and processed and stored results in MongoDB for downstream consumption and UI display.

Software Engineer Intern

May 2022 – November 2023

LifeBrand

West Chester, PA

- Utilized Python, TypeScript, Node.js, and React.js to develop a social media moderation platform
- Developed Neural Networks using Python, TensorFlow, Keras, and scikit-learn to analyze thousands of social media posts for harmful content
- Setup AWS Cloud Infrastructure such as load balancers, api gateways, and lambda functions to deploy moderation models in the cloud.
- Successfully built and deployed video and audio moderation capabilities on the platform.

PROJECTS

Animal Conservation App | *Python, Flask, Selenium, SpeciesNet API, Git*

March 2025 - Present

- Building a Python/Flask web app that identifies animals from uploaded images using the SpeciesNet API.
- Uses Selenium and Pandas to scrape and process conservation data, generating custom graphs and range maps.
- Integrates social media features to let users log sightings and create a shareable animal discovery diary.

Blockfront II | *Java, Python, Spigot API, Server Administration, Git*

January 2020 – May 2022

- Managed and oversaw the operations of a Star Wars themed Minecraft server, which 10,000 plus users.
- Developed and maintained numerous plugins, accumulating over 30,000 lines of Java code to enhance gameplay
- Successfully raised thousands of dollars in funding to support server maintenance and development.

EDUCATION

University of Maryland

College Park, MD

Bachelor of Science in Computer Science, Minor in Cybersecurity (ACES) - GPA: 3.8

Aug. 2020 – December 2023

The University of Melbourne

Melbourne, VIC

University Exchange

February 2023 – July 2023

Relevant Coursework: *Data Science, Computer Vision Data Structures, Computer Systems & Networks Multi-Threading, Mobile Development, Penetration Testing, Digital Forensics,*