

# ALBIN BABU VARGHESE

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## OBJECTIVE

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Junior developer with a strong interest in Linux, Ubuntu, and open-source communities. Passionate about learning and improving, and motivated by the opportunity to work alongside and learn from experienced engineers. I am eager to take on challenges, contribute where I can, and steadily grow through mentorship, collaboration, and hands-on experience. My goal is not only to develop my technical abilities but also to support the success of the team and the wider open-source community through consistent effort and a willingness to learn.

## EDUCATION

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**PG Diploma in Cloud Architecture & Administration**, Seneca Polytechnic, Toronto Jan-Aug 2025  
Relevant Coursework: Linux Administration, Data Structures, Algorithms, Terraform, Ansible, Docker, Kubernetes, AWS, Azure.

**PG Diploma in Applied AI Solutions Development**, George Brown College, Toronto 2024  
GPA: 3.39

**B.Tech in Computer Science**, APJ Abdul Kalam Technological University, India 2018–2022

## WORK EXPERIENCE

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• **Artificial Intelligence Intern**, Kinectrics, Toronto, ON May–Aug 2024

- Developed and debugged Python and Docker-based pipelines on Linux for anomaly detection models.
- Automated builds, testing, and container deployments using GitHub Actions CI/CD workflows.
- Diagnosed issues using logs, Bash scripting, and unit tests; improved system reliability and reproducibility.
- Participated in Agile ceremonies and collaborated with cross-functional teams to meet sprint goals.

• **Developer Intern**, Fleming, Remote Jan–Jul 2023

- Implemented Android application features in Java/Kotlin with MVVM and Jetpack.
- Debugged API integrations and offline caching (Room, LiveData); improved performance and stability.
- Increased test coverage by 25% with JUnit and Espresso; maintained quality releases through CI/CD automation.

## OPEN-SOURCE CONTRIBUTIONS

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• **utils/coreutils — mv dangling symlink fix (Rust)**

Implemented support for moving dangling symlinks into directories, matching GNU coreutils behavior. Added test coverage and validated via CI. [PR #8064](#)

• **Microsoft Terminal — Triple-click Logical Line Selection**

Fixed triple-click selection to include entire wrapped logical lines instead of only a single physical line. Enhanced selection logic, added tests, and validated across scrollbar buffer. [PR #18885](#)

• **LensKit — Mean Average Precision Module**

Designed and implemented the MAP metric in `lenskit.metrics.ranking`, refactored rank computations, and added comprehensive tests achieving 88% coverage. [PR #739](#)

- **Bun — TextDecoder Fatal Option Fix**

Corrected coercion logic for the `fatal` option in `TextDecoder`, ensuring proper boolean handling. Added and formatted tests for CI coverage. [PR #19378](#)

- **Matplotlib — Pie Chart Zero-Wedge Error Fix**

Added error handling to raise `ValueError` when all pie wedge sizes are zero, preventing NaN conversion errors. Included targeted test coverage. [PR #30019](#)

- **Linux Kernel — Rust Documentation**

Contributed documentation improvements to the Rust for Linux kernel project, enhancing clarity and usability for new contributors. [Patch](#)

## PROJECTS

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- **Food Delivery Backend (Go, MongoDB, PostgreSQL, Redis, Nginx, AWS)**

Developed, tested, and debugged Go microservices; collaborated on architecture of domain services; configured Nginx for load balancing and SSL termination; defined health checks, logging, and monitoring; supported CI/CD pipelines using Docker and GitHub Actions.

- **Pokedex Object Detection App (Python, Streamlit, YOLOv5)**

Built real-time object detection pipeline with YOLOv5; integrated PokeAPI for dynamic data retrieval; containerized with Docker; deployed on AWS ECS Fargate; automated builds and unit/integration tests with GitHub Actions.

## VOLUNTEER EXPERIENCE

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- **Kerala Flood Relief Volunteer**, Ernakulam, Kerala

Aug 2018

Gathered requirements for supply distribution, coordinated volunteer teams, and liaised with local authorities.

- **Dialysis Patient Support Website**, APJ Abdul Kalam Technological University

Mar–May 2021

Defined technical specifications and developed a React/Node.js app; debugged server-side logic; integrated MongoDB and payment gateway for crowdfunding.

## SKILLS

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**Programming Languages** C, Rust, Python, Go, C++, Kotlin, Java, JavaScript, Bash,

LaTeX

**Kernel/Systems**

Git, patch workflow, Linux debugging (`gdb`, `strace`), containers, CI/CD

**Cloud Platforms**

Ubuntu/Debian, AWS (EKS, ECS, RDS, S3), GCP, Azure

**DevOps**

Docker, Kubernetes, Terraform, Ansible, GitHub Actions, Continuous Integration (CI), Continuous Delivery (CD)