Arman Singh Kshatri

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Education

IIIT Naya Raipur — Raipur, Chhattisgarh
B.Tech. in Data Science and Artificial Intelligence, CGPA: 8.39 — *2022 – 2026*

Experience

BeBetta - Software Engineering Intern — Bangalore, India
Technologies: Golang — *May 2025 - Present*

- Contributing to the design and development of scalable, event-driven backend microservices using Golang, with a focus on performance, maintainability, and cloud-native best practices.

CreditSea - Software Engineering Intern — Remote, India
Technologies: Kubernetes, Docker, Terraform, ArgoCD, Grafana — *November 2024 - April 2025*

- Implemented robust CI/CD pipelines, reducing deployment times by 40% and improving overall system reliability. Reliability was ensured using probing techniques and roll-out update policies.
- Collaborated with cross-functional teams to ensure seamless application deployment and monitoring using Grafana, Prometheus and Loki.

GradeMyGrain - Software Developer Intern — Remote, India
Technologies: Flutter, Firebase — *May 2024 - June 2024*

- Created a data collection mobile application using flutter allowing user to seamlessly collect data for dried Tea Samples.

Projects

Goback: Distributed Backup System | GitHub

- Technologies: Go, Docker, Distributed Systems
- Created a distributed local backup tool designed to facilitate secure and efficient file backups. The tool includes a client and server component to manage and perform backups across different machines.

Bhess-Engine: UCI Chess Engine (WIP) | GitHub | IEEE

- Technologies: Rust, Bitboard, NNUE
- Developing a high-performance chess engine in Rust utilizing Bitboard representation and Neural Network-based Evaluation (NNUE), FEN string parsing to accurately set up board positions from standard notation.

Grafana Monitoring Stack | GitHub

- **Technologies:** Go, Kubernetes, Prometheus, Grafana, Docker, Loki
- Set up a monitoring stack using Prometheus and Grafana to visualize and analyze the performance metrics of the simulated faulty backend in Go to generate metrics and logs for monitoring.

Wator-OpenGL | GitHub

- Technologies: C, OpenGL
- Implemented a predator-prey population dynamics simulation using OpenGL, enhancing performance and managing large-scale simulations efficiently through multi-threading.

Publications

"Bhess Engine: A Rust Chess Engine Using NNUE and Zobrist Hashing" - IEEE AIIoT 2024

- Presented novel approaches combining neural network evaluations with classical chess algorithms such as Zobrist hashing and quiescence search.
- Explored the impact of hybrid techniques on search efficiency and game-playing performance.

Technical Skills

Languages: Rust, Go, Python, C, C++, Shell Script, Dart, Typescript, JavaScript
Frameworks: Flutter, React, NextJS, OpenGL, GraphQL
Tools: Kubernetes, Docker, AWS, Firebase, Linux, Git, Terraform, CI/CD Pipelines
Concepts: Distributed Systems, Computer Graphics, Web Development, Cloud Infrastructure, DevOps Practices