

Yogesh Aggarwal

yogeshaggarwal.in | @linkedin/yogeshdev215
contact@yogeshaggarwal.in | +91 9136566908

EDUCATION

GGSIU UNIVERSITY

CSE: INDUSTRIAL INTERNET
OF THINGS (IIOT) (4TH YEAR)
CGPA: 8.5

LINKS

@yogeshaggarwal.in
@github/yogesh-aggarwal
@linkedin/YogeshDev215
@twitter/YogeshDev215

COMMUNITY WORK

SQL TOOLS [PyPi](#)

| 70K+ DOWNLOADS, 2K+ ACTIVE
Python package for low-thought,
multithreaded SQL database
handling using numpy.

COMMON REACT TOOLKIT

[GitHub](#)

| 15K+ DOWNLOADS, 500+ ACTIVE
Developed a react toolkit with
caching, hydration, reactive state
management, 143% performance.

SELF DRIVING CAR [GitHub](#)

| MACHINE LEARNING, COMPUTER
VISION

Lane detection algorithm for
self-driving car using OpenCV,
Python, and PID control.

SKILLS

Over 500k+ lines:

C/C++ • Golang • Python • Shell
JavaScript/TypeScript • Dart
CSS/SCSS • Java • Assembly
Rust • GLSL • OpenGL • Vulkan

AWS • GCP • Firebase • MongoDB
DynamoDB • MySQL • SQLite3
Redis • PostgreSQL • Hadoop

CMake • Premake • MSVSC
GCC • NodeJS • Swaggers

Designing:
AdobeXD • Figma

EXPERIENCE

VIVEKANANDA INSTITUTE OF PROFESSIONAL STUDIES — TECHNICAL CAMPUS | AD-HOC PRODUCT LEAD, MANTHAN ERP

2022 — 2024 | New Delhi, IN, [Admin Dashboard](#)

- Delivered **70% operational improvements** by developing an ERP system *from scratch* currently being used by over **15k+ students** and faculty.
- Led a 5-member team to develop 2 dashboards (**MERN**) for administration & use and a dedicated academics app for students (**React Native**).
- Automated attendance tracking & leave management of faculties all brought together by integrating *biometric machines* & powerful reporting done through D3 & ChartJS.
- Utilized scheduled *edge cloud functions* & *GCP* for reporting, biometrics, attendance regulation, reminders, and other tasks powered by *Linux VMs*.

YOULAUNDRY | AD-HOC FREELANCE PRODUCT DEVELOPER

2023 | New Delhi, IN, [App on Play Store](#)

- Spearheaded laundry service startup platform serving 2k+ satisfied users.
- Led cross-functional team of 4, architecting **Flutter** based mobile solutions *from scratch* for customers, admins & delivery agents.
- Made use of **Firebase** for real-time push notifications, data storage, and **MERN (TypeScript)** stack based admin panel all secured by **JWT sessions**.

SELECTED PROJECTS

EMAIL AUTOMATION | AUTOMATA | [GITHUB](#)

NodeJS, TypeScript, Gmail, GCP, BullMQ, API, Docker

- Reduced the workload by 90% by implementing a real-time and fully-functional email labeling and replying system.
- Utilized advanced queuing using BullMQ to empower the realtime working of the system even under high workloads.

DOCKER'S CLONE FROM SCRATCH | MOCKER | [GITHUB](#)

C++, Syscalls, Namespaces, UnionFS, Container Orchestration, Devops

- Developed a high-performance container management system from scratch in C++, leveraging Linux kernel namespaces and systems programming expertise.
- Introduced automated container orchestration via compose file, enabling coordinated multi-container application deployment and management.
- Implemented robust client-server architecture with diverse client interfaces including CLI, web & Desktop app powered by web sockets (under progress).

DNS SERVER WITH CUSTOM TLD(S) | BACKBONE | [GITHUB](#)

C++, Local DNS server, RFC1035, LRU & LFU Caching, Custom Domain

- Implemented a fully-fledged DNS server in C++ adhering to RFC 1035, featuring an efficient caching system built on top of LRU & LFU mechanisms to be able to work on embedded systems as well.
- Seamlessly resolving custom domain names, forming the backbone of a self-contained web ecosystem serviced by a custom made browser under progress called "Steve".
- Achieved interoperability with standard DNS requests while maintaining complete autonomy over domain resolution.