

# Krishna Agarwal

✉ [kriaga3@gmail.com](mailto:kriaga3@gmail.com)

☎ +91-9790721022

🌐 [in /in/kriaga/](https://in.linkedin.com/in/kriaga/)

🐙 KriAga

🌐 [krishnaagarwal.me](https://krishnaagarwal.me)

## Work Experience

### Optum (United Health Group) | Software Developer | July 2019 - Present | Hyderabad, India

- Designed and developed automated migrator and emulator for IBM DataStage ETL jobs using PySpark, Apache Ignite, and Apache Airflow with a cost-saving potential of \$20M.
- Automated the entire QA activity for data pipeline migration project with data comparison and validation engine developed using Python, Apache Airflow, and PostgreSQL, earlier being handled by a big QA team manually.
- SME in the team dealing with health care real-time streaming data with more than 200 million records a day.
- Built CICD pipelines for code scanning and deployment for multiple teams and projects.
- Designed and developed a dashboard for the leadership and managers to visualise Agile Metrics (Sprints and Kanban) from Rally APIs and SwiftKanban by creating intuitive charts for more than 200 teams for a holistic view of the organisations' workforce. Tech Stack – Python, Angular, Chart.js, Docker – K8.
- Conducted Python training sessions for ETL Developers, DBAs, and Java Developers.
- Currently working on enriching real-time data and sending it to downstream applications while maintaining performance.

### Shantou University | Research Intern | March - April 2019 | Shantou, China

- Designed and developed a Geospatial-based Encryption Algorithm in *Python and C* that could get better performance than DES and AES Algorithms.

### Factly | Intern | October - March 2019 | Hyderabad, India

- Created data acquisition pipeline and visualization charts of petrol, diesel, and crude prices in India over a period of 50 years using *Python, Angular, and Chart.js*.
- Worked as a frontend developer in project Dega – a Google funded project to create a platform that can be used by journalists and bloggers to write effective articles against fake news. *Tech Stack - Nuxt.js & Bulma*

### Optum (UHG) | Intern | May - July 2018 | Hyderabad, India

- Designed, developed, and deployed for a monitoring and alerting dashboard for developers, managers, and leadership of the Data Solutions Team, in a period of 2 months with a team of 5 interns with more than 10 feature points. Work got appreciation from VP Technology – Optum, also secured a PPO. *Tech Stack – Node.js, Angular, Java – Hbase*

### Freelancer | Freelance | January 2020 – Present

- A Trading bot when triggered from Fyers sends alerts on Telegram and trades on TradingView using its APIs. Implemented trading algorithms like CPR for trading.
- Scrape shares data from Sensibul website for sending daily scheduled alerts of share prices to be used by other scripts for trading

- Selenium script to unspam emails with a specific subject or body, for Gmail and Outlook.

## Achievements and Awards

- National Winner #OpenGovDataHack 2018 - Ministry of Electronics and IT, Govt. of India
- Best Product Award 2019 - Vellore Institute of Technology
- Performance Award - H1 2021, Optum
- Team Excellence Award - Q4 2020, Q2 2021 Optum
- Sustaining Edge Award - Q4 2019, Q3 2020 Optum
- Star Award - Q2 2021, Q4 2020, Q3 2020
- Runners up, TLCP TDP Mentorship Program - Q3 2020, Optum

## Project

### Nithyam | Attendance Monitoring System | Python OpenCV, Resnet, Angular, Flask | 2018

- Prototyped and developed a dashboard-cum-system for the Tamil Nadu e-Governance Agency for real-time attendance of students in Govt. schools using Facial Recognition on low-end systems.

### Teeka | Healthcare Ecosystem | Android, PHP, Node.js, HTML, CSS, Tableau, AWS | 2018

- Developed as part of #OpenGovDataHack, a comprehensive healthcare ecosystem for child vaccination and maternity care. Enabled connectivity between PHCs and the public, encouraging institutionalized births. Targeted to significantly reduce IMR and MMR in India. Winner of a cash prize of ₹2,00,000 from Ravishankar Prasad, Minister of Electronics and IT, Govt. of India.

### Health Checker | Disease Detection and Treatment | Python, SQL, Docker, Selenium, Scrapy | 2018

- Health Checker is a portal that shows a list of symptoms and based on the selected symptoms, the possible medical conditions. It can scrape the web and show the treatment for those medical conditions and also the contact details of the nearest doctors based on the user's location. On being provided a text with recognizable symptoms it can identify the disease of the patient and suggest the necessary treatment. The code uses a couple of APIs from ApiMedic and BetterDoctor.

## Education

- B. Tech in Computer Science and Engineering | Vellore Institute of Technology | 2015 - 2019 | CGPA - 8.47
- Higher Secondary | Seth M. R. Jaipuria School | 2001 - 2015 | 91.2%

## Responsibilities

- Linux Club: Batch Coordinator
- Data Analysis: Member
- CodeChef Chapter: Co-Founder

## Skills

Python | Angular | Java | MongoDB | Apache – Airflow | DevOps – Docker, Kubernetes, Jenkins | Big Data – PySpark/Spark, Hbase, Hive, Apache – Ignite | MySQL | Cassandra | Nuxt.js | Node.js