

## Profile Summary

Seasoned Software Engineer with a proven track record in full-stack development and cloud-native architecture design. Experienced in a broad suite of technologies including *Microservices Architecture, Machine Learning, Big Data, and Distributed Systems*. Adept in numerous programming languages, with a strong focus on *Python, JavaScript/TypeScript, PHP, C#, and Go*. Committed to continuous learning and leading-edge technology, with exceptional skills in collaboration, problem-solving, and driving projects to completion under tight deadlines.

## Education

### University of Houston

M.S. in Computer Science

Houston, TX, 2021-2023

### Keshav Memorial Institute of Technology

B.Tech. in Computer Science

Hyderabad, India, 2014-2018

## Languages

English: Fluent Hindi: Native

## Technical skills

**Languages:** Python, JavaScript/TypeScript, C#, Java, Go, PHP

**Frameworks & Libraries:** **Python:** Flask, TensorFlow, PyTorch, PySpark / **JavaScript:** NodeJS, Angular, JQuery / **C#:** .NET, Unity

**Databases:** **SQL:** MySQL, SQLite3, Amazon RDS /

**NoSQL:** MongoDB, Neo4J, ElasticSearch, Redis, DynamoDB

**Dev Tools:** Git, Jest

**Cloud & DevOps:** Microservice Architecture, AWS, GCP, Linux, Docker, Kubernetes

**Project Management:** Jira

## Professional Experience

### Colorado Center for Personalized Medicine

#### Software Engineer

Denver, CO Sep. 2024 - Present

- Develop **bioinformatics pipelines** integrating genetic data with electronic health records, advancing precision medicine and supporting cutting-edge genomics research for millions of patients.
- Enhance efficiency and scalability of genomic analyses by deploying containerized workflows in *HPC* and *cloud* environments for one of the world's largest biobanks.

### AutomationEdge

#### Software Consultant

Houston, TX Jul. 2023 - Jul. 2024

- Optimized **CareFlo**'s architecture and scalability using *Java, NodeJS, Python*, and *AWS*. Integrated healthcare APIs with data pipelines and AI models, ensuring compliance and predictive insights for an end-to-end home healthcare solution.

### Slalom Build

#### Software Engineer (intern)

Houston, TX Jun. 2022 - Aug. 2022

- Developed a serverless API using *TypeScript* and *Node.js* for the **Meaningful Work Slack chatbot** application, enabling over 13,000 employees to provide feedback on their work and facilitating data collection for employee satisfaction measurement. Utilized a myriad of *AWS* technologies including *DynamoDB, Lex, Lambda, SQS, EventBridge, and CloudFormation* for backend development and DevOps.
- Collaborated within a multidisciplinary team including Data Engineers, Software Engineers, and the leadership team, maintaining close communication and asking calibrated questions to remove bottlenecks and reach alignment.
- Delivered technical presentations, including at the monthly Architecture Collaboration meeting with an average audience of 100, to showcase new designs, features, and development plans. Maintained a high engagement in conversations, asking calibrated questions to reach alignment and optimize for delivery.

### Darwinbox

#### Senior Software Engineer

Hyderabad, India Mar. 2018 - Oct. 2020

- Participated in the technical effort of an HR Management SaaS company, reporting directly to the CTO and spearheading the development of cutting-edge, scalable architecture solutions using the latest technologies and platforms, ensuring optimal performance and efficiency. Joined at an early stage and supported the scaling of the business to serve the global enterprise market.
- Spearheaded pioneering solutions as **R&D Lead**, which provided the company with a significant competitive advantage and revenue boost, and garnered industry recognition and accolades after demonstrations at TechHR, the largest HR tech conference in Asia, for 2 consecutive years.
- Owned the **PMS (Performance Management System)** module and was responsible for all development within the module, using *PHP (Yii), JQuery, MongoDB, MySQL, Redis, ElasticSearch, and S3*. Led a module overhaul that resulted in a 300% increase in usage.

- Led a team of developers to build a performant, service-oriented framework using *NodeJS, MongoDB, PySpark, Redis, Angular, SQS, S3, and ElasticSearch* for processing and generating **real-time reports and analytics dashboards**, capable of processing the data for millions of users within seconds.
- Developed a **contactless biometric attendance system** using *NodeJS, Lambda, MongoDB, DynamoDB, Rekognition, S3, Python, Keras, OpenCV, and NumPy*, with an API for seamless integration of **facial recognition** with liveness detection into various application modules.
- Collaborated on an **OCR engine** with external partners to automate the parsing of ID documents and receipts using *Python, R (shiny), Tesseract, and Tensorflow.*, enhancing the operational efficiency of employee onboarding by 80%.
- Played a key role in **architecture and design optimization**, led rigorous code reviews, and provided feedback that improved application quality, increasing responsiveness by 50% and reducing cloud costs by 40%.
- Enhanced application security and compliance as lead developer on the **AppSec** team, identifying vulnerabilities, developing effective security protocols, and ensuring compliance with industry standards and best practices.

#### Software Engineer (intern)

Hyderabad, India Jan. 2018 - Mar. 2018

- Contributed to the development and maintenance of complex solutions, focusing on efficiency, productivity, and quality.
- Built a **voicebot** for the Darwinbox mobile app using *DialogFlow, Go, Python, and a custom RASA NLU* pipeline, providing APIs that reduced action time by 75% and established the groundwork for Darwinbox's AI feature set.
- Developed a **web crawler and scraper** to improve voicebot training data, leading to a 50% increase in voicebot accuracy with *NodeJS and JQuery*.
- Engineered a *Python*-based **profanity filter and sentiment analyzer** to assess employee feedback, enabling clients to promote a positive workplace culture within their companies.
- Crafted *HTML5 and CSS3* **event registration forms and email campaigns**, resulting in higher sign-ups and improved email open rates.

#### GGK Tech

##### Software Engineer (intern)

Hyderabad, India Oct. 2017 - Dec. 2017

- Completed comprehensive training program in *C# and .NET* development, acquiring in-depth knowledge of production-scale development practices.
- Collaborated with experienced developers to design and implement complex features, gaining practical experience in problem-solving and critical thinking.
- Demonstrated ability to write efficient, reliable, and maintainable code, contributing to the overall quality of the codebase.

## Projects Experience

#### Gumo

Apr. 2021

- Engineered a web-crawler and scraper using *NodeJS, MongoDB, Elasticsearch, and Neo4J* from a family of nested dynamic web pages.
- Launched and ranked as one of the Top 10 web crawling packages on npm, with an estimated 2000+ users utilizing the package in knowledge mining applications.

#### SmartCities-Project-1

Dec. 2021

- Implemented and deployed a cutting-edge technology solution that leveraged *Python, OpenCV, and TensorFlow* to deliver UAV Tracking for Smart Cities, complete with advanced features like Pedestrian detection, re-identification, and tracking capabilities, all of which were meticulously trained on the P-DESTRE dataset.

#### Camera-based Heart Rate Measurement in the Cloud

May 2022

- Implemented a heart rate estimation system with *Python, OpenCV, and AWS*, as well as a webcam, and enhanced capabilities by leveraging cloud technologies to accommodate multiple concurrent measurements, thereby significantly impacting the field of non-invasive cardiovascular monitoring.

#### Purgatorio

May 2023

- Developed a game using *Unity and C#*. In this action-packed rogue-like adventure, battle your way through purgatory to defeat the seven deadly sins as you face intense boss fights and pick up powerful weapons along the way. But beware - there are no saves, so you'll need to conquer the game in one go!

## Publications

#### Tech@Darwinbox A Glimpse Under the Hood of Face Recognition at Darwinbox

Nov. 2020

Redacted and published a walkthrough of the implementation of Face Recognition in the Darwinbox mobile application.

## Leadership Activities

#### KMIT AI Club Student Mentor

2017 - 2018