MEET PARIKH

(+49) 15510 229 896 | Berlin, Germany
meet.soc.7@gmail.com | Github | LinkedIn

EDUCATION

Charotar University Of Science And Technology	*May 2011 - April 2015*
Bachelor of Technology in Electronics And Communication	Cumulative GPA: 8.14 / 10

RELEVANT EXPERIENCE

‣ Experience designing and building backend systems at scale, with a focus on distributed systems, data infrastructure, and performance optimization.
‣ Developed high-performant backend services for TomTom's routing platform in C++.
‣ Leveraged Azure Kubernetes Service to deploy and orchestrate distributed services.
‣ Led design of product metrics building data pipelines in PySpark on Databricks to process over 100M data points daily.
‣ Partnered with data scientists to co-design ML model training infrastructure over Delta Lake.
‣ Built internal developer tools including a JavaScript-based map visualization platform for debugging.

EXPERIENCE

Software Engineer II | TomTom – Berlin   *July 2023 - Present*

‣ *Technologies:* C++, Python, Azure, Kubernetes, PySpark, Databricks
‣ Developing routing API services and navigation SDK in C++ for new EV routing features.
‣ Developed a C++ based charging station service for real-time data for route planning.
  • Used Kubernetes on Azure for scalable deployment in a distributed environment.
  • Implemented high-performance parser using SIMD reducing memory usage.
‣ Led design of product metrics like battery level prediction accuracy and routing success rate.
  • Designed a solution to define and store telemetry events across different SDKs.
  • Implemented pipelines in Python and PySpark to process over 100M data traces daily.
  • Built a Power BI dashboard to visualize these metrics for presenting to clients.
‣ Co-leading data infrastructure in Delta Lake for ML model training workflows.
‣ Built a JavaScript-based visualization tool to map vehicle routes for debugging.
‣ Led initiatives to improve data quality validation and adoption of Terraform for IaC.
‣ Mentoring juniors by walking them through architecture, pair programming and workflows.

Senior Engineer | Mercedes-Benz   *November 2022 - May 2023*

‣ *Technologies:* C++, Python, Linux, Embedded Systems
‣ Built C++ components for secure OTA updates, enabling large-scale deployments in vehicles.
‣ Developed and optimized firmware modules for a custom AUTOSAR-based in-house OS.
‣ Integrated diagnostics and logging features to improve system traceability and maintenance.

Software Engineer II | HP Inc   *April 2019 - October 2022*

‣ *Technologies:* C++, C, Python, Linux
‣ Designed telemetry for a fleet of 20M+ printers for key performance and business metrics.
  • Collaborated cross-functionally across different firmware teams to define telemetry events.
  • Implemented a C++ module to store and batch process events to send to the AWS cloud.
‣ Led collaboration between firmware and cloud teams to build subscription based IoT printers.
‣ Contributed to a unified firmware architecture across diverse product classes.
‣ Developed a secure and fail-safe remote software update solution using C++ and C.
‣ Optimized memory for small memory footprint devices.
‣ Built a ML model to predict ink usage, enhancing supply chain efficiency and user experience.

Senior Software Engineer | Robert Bosch   *August 2018 - March 2019*

‣ *Technologies:* C++, Linux, Embedded Systems
‣ Built modules for the Near-Range Camera system enabling real-time ADAS object detection.
‣ Enhanced module stability by designing tests using GoogleTest and Pytest.

System Engineer | Tata Consultancy Services   *December 2015 - July 2018*

‣ *Technologies:* C++, C, Linux, Embedded Systems
‣ Developed camera stack enabling park assist, reverse traffic detection and multi-view.
‣ Designed middleware library and device driver for communication between the UI and ECU.

Web Developer | Actonate   *July 2015 - December 2015*

‣ *Technologies:* Javascript, AngularJS, Sails.js, Node.js, HTML, CSS
‣ Built a web application for an investment management firm.

SKILLS

Programming Languages
· C++ · Python · C
· Java · JavaScript

Tools and Technologies
· Databricks · PySpark
· Azure · Kubernetes
· Git · Terraform · Linux

Core Competencies
· Systems Programming
· Data-Oriented Design
· Distributed Systems
· Mentoring · Leading Projects

PROJECTS

MyPhotos
DuckDB, Parquet, S3
Photo storage system using S3 for image storage, Parquet files for metadata, and DuckDB to query and manage this data.

File Sync Client
TCP/IP, Python
A program to keep directories synced between two hosts.

Doctr - a Healthcare Portal
ReactJS, PHP, MySQL, HTML
Healthcare portal integrated with national ID to fetch and store medical records.

Mini SQL Lite
SQL, Databases, Python
A small SQL engine with support for basic queries.

HIIT Timer
ReactJS
A progressive web application to track and time my workout.

Inventory Management System
Java, Java Servlets, SQL
A web application to manage inventory of an electrical firm.