Mumbai, India
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SAIPRASAD BALASUBRAMANIAN

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SUMMARY

Results-driven software developer with 6+ years of experience delivering scalable, high-impact solutions across diverse industries and tech stacks. A passionate advocate for engineering excellence, process optimization, and mentorship. Committed to creating robust systems, empowering teams, and contributing to the open-source community to drive innovation and collaboration.

Programming Languages & Frameworks: Python, Django, Flask, FastAPI, gRPC, Ruby
Data Engineering & Analysis: PySpark, Deltalake, NumPy, Pandas
Cloud & DevOps Tools: Docker, AWS, GCP, Git, Github Actions, Gitlab CI, Jenkins, GoCD
Databases & ORM: Django ORM, PostgreSQL, MySQL, Redis
Software Practices: OOPS, SOLID, Clean Coding, Unit Testing

EMPLOYMENT

Application Developer | Senior Consultant	Thoughtworks	Nov 2020 - Present

Global Wireless Communications Provider - Enhancing Engineering Excellence

- Delivered a **20% improvement** in developer efficiency through optimized testing practices and streamlined release pipelines.
- Engineered a Pytest-based testing framework, significantly scaling automated test coverage and ensuring system reliability.
- Championed the adoption of cutting-edge CI/CD tools and practices, driving seamless and stable production deployments.
- Elevated system performance by leveraging Docker to standardize and streamline development and deployment environments.
- Played a pivotal role in optimizing critical functionalities across Python, C, and C++ projects, ensuring superior product quality.

Tech Stack: Python, Docker, C, C++, Networking, Jenkins

South East Asian Retail Giant - Transforming Retail Data with Scalable Solutions

- Architected a cross-cloud data platform aggregating data from 10+ sources, enabling near-real-time analytics and strategic decision-making.
- Built frameworks for DAG and Spark Job creation, **improving developer productivity by 40%** and **reducing development time by 60%.**
- Leveraged Delta Lake to optimize ETL processes, cutting job execution times from 8 hours to under 1 hour.
- Rebuilt pipelines and developed a scalable clickstream analytics platform that processed terabytes of data, reducing data issues by 80% and boosting stakeholder confidence.
- Mentored new team members, facilitating faster onboarding and contributing to a collaborative and high-performing team environment.

Tech Stack: Python, PySpark, AWS, Deltalake, Airflow, SQL

Major Indian Private Bank - *Building a Hyperpersonalization Engine for Targeted Offers*

- Worked with the whole data lifecycle of the project right from data ingestion to the analytics engine to the feedback layer.
- Enhanced Airflow-based frameworks, accelerating DAG creation and operational efficiency across workflows.
- Integrated high-impact customer engagement channels such as WhatsApp, RCS, and VoiceBlast, with WhatsApp adoption surpassing all expectations. WhatsApp became one of the most used and preferred channel for customers over time with an engagement of over 70%.
- Delivered regulatory-critical modules like a Do Not Disturb feature, ensuring compliance with RBI mandates and safeguarding customer preferences.
- Reduced SLA breaches by 30% through proactive automation and process enhancements, ensuring seamless production support.
- Cultivated a high-performing team by mentoring junior developers and fostering a culture of technical excellence.

Tech Stack: Django, React, Google Cloud, GoCD, SQL

Software Developer	Greyatom Edutech	Apr 2018 - Mar 2020

- Architected and developed a cutting-edge online coding platform with an integrated judging system, enabling seamless support for over 10 programming languages and fostering a robust learning environment.
- Engineered and launched a high-performance website from the ground up using Python, Django, and gRPC, achieving a 3x boost in speed and user experience compared to its predecessor.
- Designed and implemented secure, scalable solutions allowing users to execute Data Science code online in isolated Docker environments, ensuring data integrity and system reliability.
- Optimized and modernized the legacy website, reducing its size by 85% and achieving a 4x improvement in speed, significantly enhancing user satisfaction and engagement.

Tech Stack: Python, Django, GRPC, Docker, AWS, Javascript, SASS, Ruby, Jenkins

EDUCATION

Navi Mumbai	Mumbai University	June 2013 – May 2015

- Pursued undergraduate studies in Electronics & Telecommunications before transitioning to a career in tech to focus on hands-on projects and development.
- Led a multidisciplinary team of engineers in the international robotics competition, ROBOCON, for over three years, designing cost-effective, award-winning robots recognized for innovation.
- Secured the **Best Economic Robot Award** and ranked 5th nationally, showcasing excellence in problem-solving and engineering.

PERSONAL / SIDE PROJECTS

- **Financial Statements Parser (2024):** Developing a robust parser to streamline financial statement analysis, supporting personal portfolio monitoring systems.
  Tech Stack: Python, FastAPI, Redis, AWS

- **Domain Tracker (2020-2023):** Designed and launched a domain monitoring platform used by 300+ users to track 1,000+ domains daily.
  Tech Stack: Python, Django, PostgreSQL, Redis, AWS

- **CovidAPI (2020):** Built APIs interacting with the COVID-19 dataset from John Hopkins University, powering 100+ public dashboards and serving over 15 million API calls globally. Awarded a Digital Ocean grant for contributions to COVID-19 response efforts.
  Tech Stack: Python, Flask, Redis, Digital Ocean

- **CoWin Library (2020-2021):** Created a Python wrapper for CoWin APIs, enabling bots to track and publish COVID-19 vaccine availability across India.
  Tech Stack: Python

- **LibDB.sh (2019):** Developed a platform providing actionable insights into project dependencies, streamlining dependency analysis and management.
  Tech Stack: Python, Flask, Redis

ADDITIONAL EXPERIENCE AND AWARDS

- **Ripple Effect Award (2019):** Honored for driving technical excellence and leadership in launching a high-impact coding platform at Greyatom.
- **Talk:** Delivered a talk titled "What I Wish I Knew Before Starting My Career in Data Science" to data enthusiasts, sharing insights on effective learning paths and industry trends.