SHUBHAM PATIL

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EDUCATION

Master of Science, Computer Science

GPA - 3.6/4.0

Westcliff University, San Francisco, CA

Expected Dec 2025

Relevant Coursework: Machine Learning, Software Engineering, Data Science, Information Security

Bachelors of Technology, Electrical Engineering

GPA - 3.8/4.0

Savitribai Phule Pune University, MH, India

May 2020

Relevant Coursework: Data Engineering, Web Development, Artificial Intelligence, Cloud Computing

WORK EXPERIENCE

Software Engineer

Searce Inc.

June 2020 - May 2023

Pune, Maharashtra

• Developed a Node.js-based learning platform for AirAsia using MySQL and Firebase, improving module completion rates by 30% through gamification and video-based engagement (25% boost).

- Designed responsive interfaces for Dainik Bhaskar and ICICI Lombard with HTML, CSS, JavaScript, Boot-
- strap, and jQuery, reducing bounce rates by 20% and improving user retention by 15%.

 Engineered a low-latency live streaming prototypes and solution for BYJU'S on their proprietary platform using Red5 Pro (WebRTC) and Next.js, reducing latency by 40% and doubling viewership capacity.
- Architected GCP storage solutions for Aeye with a tool to capture, store, and label autonomous vehicle videos; built an ETL pipeline using Cloud Functions, TensorFlow, and BigQuery for automation.
- Orchestrated a document search engine for Tata Steel using Django, Angular, Cloud Search API, and Vertex AI. Integrated analytics dashboards with App Script, Data Studio, improving data retrieval by 50%.
- Streamlined ETL pipelines for ONDC using Python, Cloud Functions, and BigQuery, transforming transactional data into real-time dashboards with Chart.js and D3.js for digital commerce analytics.

RESEARCH EXPERIENCE

- Copyright Syncroniztion of Devices using IR Technologies (Copyright Office Government of India) L73523
- Crowd Monitoring System using Artificial Neural Networks Paper Link
- Application to Monitor and Manage People In Crowded Places Using Neural Networks Paper Link

PROJECT EXPERIENCE

SecureDNP3 - Project Link

Feb 2025

• Implemented a machine learning-based IDS for DNP3 protocol threats using Scikit-learn, XGBoost, and GNNs; improved detection accuracy and minimized false positives via feature selection and model tuning.

Career Compass AI- Project Link

Dec 2024

• Built an AI career recommender platform with GPT-3.5, LLaMA 3, and a RAG pipeline using Chroma DB, boosting personalized recommendations by 25% and reducing latency by 20%.

AI-Driven Malware Detection and Prevention System - Project Link

May 2024

• Executed a malware detection system using multiple ML models with RFE and hyperparameter tuning on a 1.55M API dataset, achieving 97% F1-score and reducing zero-day attacks by 50% with CUDA processing.

SKILLS

- AI and Developer Tools: Gemini API, Hugging Face, GPT, AI Agents, Transforms, Replit, v0, Cursor
- Backend Development: Node.js, Express, C++, Java, Spark, JavaScript, Redis, Scala, R
- Frontend Development: Angular, React.js, TypeScript, WebFlow, HTML, CSS, Figma, Bootstrap
- Databases: MySQL, MongoDB, AWS RDS, DynamoDB, Redshift, Google BigQuery, PostgreSQL
- Data Skills: ETL, Python, Data Mining, PyTorch, LangChain, Docker, Apache Airflow, Snowflake, Data Warehousing, Kafka, Hadoop, Elasticsearch, Logstash, Kibana, NLP, MCP, n8n
- Data Science: Pandas, NumPy, Matplotlib, Scikit-learn, Keras, Statistical Modeling, LLMs, Scala, CUDA
- Data Visualization: Tableau, Power BI, MATLAB, Microsoft Excel (VLOOKUP, Pivot Tables, VBA)
- Cloud Platforms: Google Cloud Platform, Amazon Web Services, Microsoft Azure, Kubernetes
- Project Management & Tools: Jira, Confluence, GitHub, Git, Microsoft Project, Microsoft Office
- Business Processes & Methodologies: Agile, SDLC, Business Requirements Gathering