Rajeev Atla

AI-Native Software Engineer Building Scalable, Secure, Smart Systems

US Citizen | 732-209-3995 | rajeev.atla@gmail.com | linkedin.com/in/rajeev-atla | github.com/RajeevAtla | rajeevatla.com

EDUCATION

Princeton University (Exchange Student)/Rutgers University - School of Engineering Sep 2025 — Dec 2026
Master of Science in Computer Engineering (Specialization in Machine Learning) *Princeton/New Brunswick, NJ*

Coursework: Multimodal AI, AI for Precision Health, LLMs, Reinforcement Learning, Machine Vision, High Performance Computing

Rutgers University - School of Engineering Sep 2021 — May 2025
Bachelor of Science (Triple Major) in Computer Engineering, Computer Science, and Data Science *New Brunswick, NJ*

Recipient of the Eleanor and Samuel Sneath Endowed Merit Scholarship for Engineering Students

Coursework: AI, ML, Distributed Deep Learning, Data Science, Robotics and Computer Vision, Info and Network Security

SKILLS

- **Programming Languages**: Python, R, SQL, Java, C/C++/CUDA, JavaScript/TypeScript, Rust, Bash
- **AI/ML**: NumPy, PyTorch, JAX, TensorFlow, Keras, Pandas, Scikit-Learn, OpenAI API, LangChain/LangGraph, OpenCV, DSPy, RAG, HuggingFace (Transformers, Tokenizers, Datasets, Diffusers), vLLM, pgvector, Pydantic, FastAPI, NLTK, spaCy
- **Visualization**: Matplotlib, Seaborn, Plotly, Tableau, PowerBI, React
- **Cloud & DevOps**: AWS, Microsoft Azure, OCI, GCP, GitHub Actions (CI/CD Pipeline), Docker, Kubernetes, Slurm
- **Tools & Databases**: Jupyter, PySpark, Hadoop/Hive, Git, Linux, PostgreSQL, MongoDB, Jira, ROS2, Codex, Claude Code

CERTIFICATIONS

- **AWS**: Certified Cloud Practitioner, Certified Machine Learning Specialist, Certified AI Practitioner
- **Oracle (OCI)**: AI Foundations Associate, Generative AI Professional, Data Science Professional, Vector AI Search Professional

WORK EXPERIENCE

AI Engineering Intern May 2024 — Sep 2024
Atlait Inc. *Remote*
- Developed a Python-SQL compression script for form data, **reducing storage costs by 7%** for enterprise clients
- Engineered PyTorch inference models for real-time predictions, **optimizing latency by 96ms** and enabling faster decision-making
- Created a $> 1TB$ RAG-PySpark system, utilizing A/B testing to optimize AI-powered search and recommendation accuracy
- Optimized Airflow-Hadoop data pipeline to **speed up analysis by 13%** in an Agile environment, speeding up development

PROJECTS

DocuMint https://bit.ly/DocuMint
- Built a 5-agent LangGraph + Gemini API doc-modernizer with Gradio, achieved **90%+ modernization coverage** on sample docs, **cut manual edit time by 50%** with a **4-tab UX**, hardened with **8 deterministic pytest cases** and network-safe skips
- Authored a modular multi-agent system with structured prompts and severity-prioritized research, **lifting modernization accuracy by 35%** and **trimming LLM API spend by 20%**

dexMCP https://bit.ly/dexmcp
- Engineered Model Context Protocol (MCP) server exposing **5+ reusable tools** and **5+ Pydantic models**
- Implemented parameter validation across **20+ typed fields** and **100% of tool inputs**
- Built asynchronous clients using **DSPy** and **LangChain** to auto-discover tools and execute multi-step requests

SuperconGAN https://bit.ly/3z7JaqZ
- Built a PyTorch-based GAN to create synthetic superconductivity data of various materials, enhancing generative AI applications
- Extracted and processed **80,000+ dataset entries** from the UCI ML Repository using Pandas efficiently
- Released Python package on PyPI, achieving over **80,000 downloads** and widespread adoption

Cityscape Mobile Tour App (Won 2nd Overall at HackExeter 2021) https://bit.ly/3OZjJ07
- Wrote controllers and models for MongoDB using Mongoose ODM to store **30+ kB of geographic data** in NoSQL schema
- Built mobile user interface allowing users to search, review, rank, and explore **100+ tours** using Flutter/Dart
- Constructed REST API using Express.js and nodemon to **increase development velocity by 20%** with hot-reloading