

# Sebastian Grammas

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## Relevant Experience

### Software Engineer Intern — ALQIMI Technology Solutions (Rockville, MD) May–Aug 2024, 2025

- Delivered production-ready conversational AI features adopted for client-facing use, converting static documents and images into interactive, searchable insights.
- Designed and shipped ALQIMI Assistant, a document-centric chat platform enabling natural language Q&A over PDFs and images using semantic search and retrieval workflows.
- Extended multimodal capabilities by integrating license plate recognition, OCR text extraction, and analog/digital clock detection to unify computer vision with chat-based UX.
- Built a Visa demand forecasting pipeline (ARIMA/SARIMA/Prophet/LSTM) incorporating macroeconomic signals (e.g., unemployment, changes in tech job demands) to improve issuance trend prediction.
- Automated ingestion of web-scraped PDFs and metadata into Elasticsearch-backed search; optimized Vega dashboards and anomaly ranking via relevance/frequency scoring experiments.

### Technical Founder / Lead Software Engineer — Solverah (Open Source) 2025–Present

- Building a job-matching and career-profiling platform using React + TypeScript + HTML frontend and Flask + Python APIs, with a focus on vertical AI agents for personalized recommendations.
- Implemented structured profile and resume intake workflows and backend services to support scalable similarity scoring and future model training on user/job representations.
- Designed deployment-ready architecture with cloud storage integration for uploaded resumes and artifacts, emphasizing reliability and low-latency user experiences.

### Machine Learning Engineer — FireNet (Academic Project) 2025

- Implemented a U-Net-based segmentation model to predict next-day wildfire spread from geospatial inputs; developed training/inference code and evaluation workflows.
- Engineered dataset preprocessing and experiment tracking to benchmark model performance and iterate on architecture and loss configurations.

## Relevant Skills

Full-Stack: React, TypeScript, HTML/CSS, Flask, Python, REST APIs  
AI/ML: Conversational AI, semantic search, OCR, object detection, time-series forecasting (ARIMA/SARIMA/Prophet/LSTM), U-Net segmentation  
Data: Web scraping, NiFi pipelines, Elasticsearch, dashboarding (Vega)  
Security: Modern Binary Exploitation (ROP, reverse engineering, mitigations), network security fundamentals  
Languages: Python, C++, C, JavaScript, Assembly

## Education

### Rensselaer Polytechnic Institute (RPI), Troy, NY B.S. Computer Science

Expected May 2026 | GPA 3.2

- Concentration: Systems & Software | Minor: Economics
- Scholarships: Rensselaer Recognition Scholarship; Rensselaer Leadership Scholarship
- Activities: NCAA Soccer; Pi Kappa Alpha Fraternity (Recruitment Officer)

## Additional

ISC2 Certified in Cybersecurity (CC) | Top 500 National Cyber League | Open-source contributor (Easy Artistry, CareerMatch AI)