

TYLER ALLEN

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EDUCATION

Georgia Institute of Technology

Bachelor of Arts in Computer Science, Focus in AI and Devices

Atlanta, GA

Aug. 2013 – May 2016

EXPERIENCE

EvidentID

November 2016 – April 2025

Software Engineer

Atlanta, GA

- Developed the core backend service in Scala with MongoDB as the database at a fast-paced startup as one of the first engineers at the company; enabling secure sharing of Personally Identifiable Information (PII) with end-to-end encryption using a custom Public Key Infrastructure (PKI) system that remains central to the Evident's platform today
- Led long-term development and maintenance of a Python service that fetched background check data from multiple APIs, securely processed the data with NLP and other techniques, and automatically evaluated compliance with customer-defined rules and ensured legal requirements under the Fair Credit Reporting Act (FCRA) were met; this service was a critical component of business revenue for several years
- Led from idea to deployment the implementation of a Python service utilizing a fine-tuned BERT model to better classify raw crime descriptions to FBI crime categories used for automated background checks; achieved a 50% increase in fully automated checks and significantly reduced manual review time by utilizing model prediction probabilities
- Led the development a Python REST API service using Flask to centralize all notification and branding configuration in one PostgreSQL DB enabling a consistent API for accessing data for both backend and front end; implemented OAuth for frontend and API keys for backend
- Led the development a Python REST API using FastAPI for an authentication service for an Emissary API Gateway in Kubernetes; worked closely with Front End developers and DevOps to ensure OAuth based access to backend services worked
- Developed the backend of the Insurance Verification Service as part of an international team using Scala, Akka, and PostgreSQL; implemented new configurable rules for automated compliance checks and a REST API for document submission and data access and delivered a first in class insurance product
- Maintained end-to-end automated testing using PyTest, Selenium and Cucumber to test both frontend and backend workflows with Behavior Driven Development, ensuring thorough regression testing and reliable system functionality
- Configured and maintained Helm charts for deploying Python and Scala services on Kubernetes and allowing for automated service deployments through Jenkins CI/CD pipelines, enabling faster and easier deployments
- Maintained a legacy Elixir REST API for storing background check profile data in PostgreSQL DB, ensuring a reliable service for a critical part of the background check service
- Configured and maintained Helm charts for deploying Python and Scala services on Kubernetes and allowing for automated service deployments through Jenkins CI/CD pipelines, enabling faster and easier deployments
- Designed and implemented RabbitMQ and REST APIs for internal communication between microservices, selecting the appropriate method based on performance requirements

SKILLS

Programming Languages: Python (10+ years), Scala, Java, Elixir

Web Frameworks: FastAPI (Python), Flask (Python), Akka (Scala), Phoenix (Elixir)

Databases & Tools: PostgreSQL, MongoDB, Redis, Flyway, Alembic

Messaging: RabbitMQ

APIs & Protocols: REST APIs, RPC

Testing: Pytest, Selenium, Cucumber, Behavior Driven Design (BDD), Scalatest

Data Science & Machine Learning: Numpy, SciPy, TensorFlow, Hugging Face, BERT

Cloud & DevOps: AWS, S3, EC2, Kubernetes, Docker, Jenkins, Helm, Ansible, Nginx

Non Technical: Experience working with PII, FCRA, Insurance, Risk Decisioning