

# 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 from scratch, in collaboration with a team of the initial three developers, the core platform for securely storing and sharing personally identifiable information using Public Key Infrastructure (PKI) and end-to-end encryption in a fast-paced startup environment; implemented in Scala and Python and remains in use as a core part of the business today
- Implemented core business logic across multiple backend services using Python to extract data from documents and external APIs, enabling secure and automated Risk, Trust, and Safety assessments for domains such as insurance, criminal background checks, business verification, and identity validation
- Implemented and designed multiple REST APIs using Flask and FastAPI frameworks, supporting authorization through OAuth, authorization tokens, and API keys, enabling secure access to the platform for both front end developers and external API users allowing for more customer integrations beyond the initial phone app flow
- Developed a platform that extracts data from insurance documents and automatically evaluates compliance with customer needs, in close collaboration with insurance experts, and delivered a first-in-class product that can meet the needs of any company requiring insurance coverage validation
- 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 end-to-end automated testing using pytest and Selenium to test both frontend and backend workflows, ensuring thorough regression testing and reliable system functionality

### Highlighted Project: **Automated Background Check Compliance**

- Implemented and maintained a Python-based service that fetches background check data from multiple external APIs, utilizing ML and NLP techniques to automatically evaluate risk and ensure compliance with the Fair Credit Reporting Act (FCRA); this service served as the core component of the company's business for several years
- Implemented a Kubernetes-based service using a fine-tuned BERT model to enhance classification of background check data into known categories for automatic processing, leading to a 50% increase in automated classifications and a significant reduction in time spent by human reviewers by utilizing classification probabilities
- Maintained an Elixir-based REST API for storing background check data in PostgreSQL, ensuring reliable operation of the background check processing

### Highlighted Project: **Evident Platform**

- Developed the core REST web service in Scala using AkkaHTTP and MongoDB, providing reliable and scalable backend services for the platform
- Implemented Nginx as a reverse proxy for SSL termination, using custom certificates to authenticate downstream services and secure APIs that return sensitive information
- Designed and implemented RabbitMQ and REST APIs for internal communication between microservices, selecting the appropriate method based on performance requirements

## Technical Skills

**Languages:** Python(10+ years experience), Scala(4+ years experience), Java, Elixir

**Frameworks:** FastAPI, Flask, AkkaHTTP

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

**DevOps:** AWS EC2, Kubernetes, Docker, Helm, Ansible

**CI/CD & Testing:** Jenkins Pipelines, Cucumber, pytest, ScalaTest

**Libraries:** NumPy, Transformers, Pydantic, Slick

**Technology:** PKI, ML & AI Models + Classification