Andrew Long
Senior AI Engineer & Full-Stack

SUMMARY

Software Engineer with over 10 years of experience, specializing in AI and full-stack development, demonstrating a strong foundation in computer science with a B.Sc. from the University of Illinois at Chicago. Expert in Python, C#, JavaScript, and cloud technologies such as AWS, Docker, and Kubernetes. Skilled in machine learning frameworks including TensorFlow and PyTorch, further evidenced by AWS Certified Machine Learning and TensorFlow Developer certifications. Proficient in deploying scalable web systems and integrating AI models into high-throughput environments, with a proven track record of enhancing model accuracy and system performance in production-grade systems.

TECHNICAL SKILLS

Main Technical Skills	Python, AWS, C/C++/C#, LLaMA, LangChain
Programming Languages	JavaScript, Python, TypeScript
C++ Libraries and Tools	C/C++/C#
JavaScript Frameworks	D3.js, Ext JS, Node.js, React
Python Frameworks	Django REST framework, Flask
AI & Machine Learning	GPT, Hugging Face, LangChain, LLaMA, NumPy, PandasAI, PyTorch, Scikit-learn, TensorFlow, Transformer
.NET Platform	.NET Core
Python Libraries and Tools	NumPy, PyTorch, Scikit-learn, SciPy, TensorFlow
Data Analysis and Visualization Technologies	Jupyter Notebook, PandasAI
Databases & Management Systems / ORM	AWS DynamoDB, HDFS, MongoDB, MySQL, PostgreSQL, Redis, SQL
UI Frameworks, Libraries, and Browsers	D3.js
Cloud Platforms, Services & Computing	AWS
Amazon Web Services	AWS DynamoDB, AWS Lambda, AWS S3
Azure Cloud Services	Azure Cloud Functions
SDK / API and Integrations	API, GraphQL

Virtualization, Containers and Orchestration	Docker, Kubernetes
Version Control	Github Actions
Deployment, CI/CD & Administration	Jenkins
QA, Test Automation, Security	Selenium
Other Technical Skills	CNNs, DBs

WORK EXPERIENCE

Software Engineer, Evertune

Duration: 04/2025 – Present

Summary: Improved ML model accuracy and operational resilience for High-Scale Services using rigorous experimentation, automation, and observability.
Responsibilities: Led structured experimentation across machine learning model variants, engineered robust data preprocessing pipelines, productionized ML and LLM components, improved reliability of LLM-driven agents, accelerated experimentation velocity, and strengthened observability for deployed models.
Technologies: PyTorch, TensorFlow, scikit-learn, NumPy, Pandas, SciPy, Docker, FastAPI, Jupyter

Software Engineer, Seesaw

Duration: 01/2025 – 03/2025

Summary: Developed an NLP pipeline and scalable microservice architecture for Seesaw Learning's educational content transformation.
Responsibilities: Built an NLP pipeline for PDF conversion, designed a FastAPI-based microservice architecture for low-latency inference, integrated AWS Lambda and DynamoDB for scalable real-time processing, implemented asynchronous job pipelines, and extended backend infrastructure for real-time dashboards.
Technologies: FastAPI, AWS Lambda, DynamoDB, GraphQL

Lead/Senior/Software Engineer, The Trade Desk

Duration: 10/2017 – 06/2023

Summary: Constructed machine learning pipelines, microservices, and data processing workflows improving throughput and forecasting at The Trade Desk.
Responsibilities: Designed and deployed machine learning pipelines, refactored backend services, built fault-tolerant data workflows, improved forecasting accuracy with multi-source data integration, and developed internal performance dashboards.
Technologies: TensorFlow, scikit-learn, Docker, FastAPI, AWS S3, React, D3.js

Software Engineer II/Engineer/SDET Intern, Microsoft

Duration: 02/2014 – 09/2017

Summary: Elevated Xbox Live's scalability and deployment confidence through cloud-native services and automated testing at Microsoft's Xbox Division.
Responsibilities: Designed microservice architectures, built testing frameworks, implemented diagnostic tooling for telemetry and automated analysis, and created CI/CD pipelines.
Technologies: .NET Core, Azure Functions, C#, Selenium, Jenkins, GitHub Actions, Docker

Music Producer / ML Engineer, Music Production and ML Engineering

Summary: Developed a scalable Python pipeline and Dockerized services for audio classification and emotion tagging in independent music production.
Responsibilities: Built Python pipelines for audio classification and emotion tagging, deployed Dockerized FastAPI services, and developed spectral analysis dashboards.
Technologies: Python, TensorFlow, Hugging Face, Librosa, React, FastAPI, Docker

EDUCATION

- B.Sc. Computer Science
  University of Illinois at Chicago
  2011 – 2013
- A.Sc. Computer Science
  Elgin Community College
  2009 – 2011

CERTIFICATION

- AWS Certified Machine Learning - Specialty
- TensorFlow Developer Certificate
- Hugging Face Transformers Course