# William Smith

#### AI Engineer & ML Specialist

Building Intelligent Systems for Tomorrow

Email: [Your Email] | LinkedIn: [Your LinkedIn] | GitHub: [Your GitHub] | Phone: [Your Phone]

| Location: San Francisco, CA

## **Professional Summary**

Innovative AI Engineer with extensive expertise in deploying advanced machine learning solutions across healthcare, energy, and enterprise domains. Proven track record in developing scalable AI systems, leading cross-functional teams, and delivering measurable impact. Adept in computer vision, NLP, deep learning, reinforcement learning, and MLOps best practices, with a strong publication record in top-tier conferences.

## **Education**

Master of Science in Computer Science (Artificial Intelligence & Machine Learning)

*Stanford University* — 2018-2020

GPA: 3.9/4.0

Thesis: "Attention-Based Multi-Modal Fusion for Medical Image Classification"

#### **Bachelor of Science in Computer Science & Mathematics (Honors)**

*MIT* — 2014-2018

GPA: 3.8/4.0, Magna Cum Laude

Senior Thesis: "Optimization Algorithms for Large-Scale Machine Learning"

## **Work Experience**

#### **Senior AI Engineer**

*TechCorp AI Solutions* — San Francisco, CA 2020 – Present

- Led the development of medical imaging AI systems adopted by 5+ hospitals, processing 50,000+ scans monthly, reducing diagnosis time by 60%.
- Architected end-to-end ML pipelines utilizing PyTorch, Docker, and AWS, cutting deployment time by 70%.
- Managed a cross-disciplinary team of 8 engineers and scientists, delivering 12+ production models.
- Established MLOps practices, enhancing model reliability and monitoring.
- Authored 3 papers in CVPR, ICCV, and NeurIPS.

#### **Machine Learning Engineer**

DataSense Inc. — Palo Alto, CA 2018 – 2020

• Developed NLP models for document processing with improved accuracy by 87%.

- Built real-time fraud detection system analyzing over 1 million transactions daily with 99.2% accuracy.
- Implemented computer vision solutions reducing manufacturing defect rates by 35%.
- Mentored junior engineers and supported product integrations.

#### **AI Research Intern**

Google DeepMind — Mountain View, CA Summer 2019

- Innovated RL algorithms improving robotic manipulation sample efficiency by 40%.
- Developed simulation environments with MuJoCo and PyBullet.
- Contributed to open-source RL libraries used by 500+ researchers.

## **Key Projects & Achievements**

#### **MedVision AI** — **Medical Imaging**

- Created a CNN based on EfficientNet-B4 with attention mechanisms, achieving 94% accuracy in early diabetic retinopathy detection.
- Deployed clinical validation systems processing 500+ images daily, cutting diagnosis time from 30 to 12 minutes.

## **NLP Document Analyzer** — Legal Document Processing

- Fine-tuned BERT models for NER, classification, and summarization, reducing processing time from 4 hours to under 1 hour.
- Automated analysis for 10,000+ documents monthly via API integration.

## SmartGrid RL — Energy Optimization

• Developed multi-agent RL system with PPO, reducing energy waste by 23%, and enhancing grid stability, preventing potential blackouts.

## **MultiModal Sentiment Analysis — Customer Interactions**

• Fusion architecture integrating BERT, ResNet, and 1D-CNN achieved 87% sentiment detection accuracy, analyzing 5,000+ interactions daily.

## **Technical Skills**

Languages	Python (Expert), R (Advanced), SQL (Advanced), JavaScript/TypeScript (Advanced), C++ (Intermediate), Java (Intermediate), MATLAB (Advanced)
Frameworks & Libraries	PyTorch (Expert), TensorFlow (Advanced), Scikit-learn (Expert), Hugging Face (Advanced), FastAPI (Advanced), Next.js (Advanced), React (Advanced), Node.js (Advanced)
Platforms & Tools	Docker (Advanced), AWS (Advanced), GCP (Advanced), Kubernetes (Intermediate), CI/CD (Advanced), Git (Expert), MongoDB (Advanced), Redis (Intermediate)

Languages

# Python (Expert), R (Advanced), SQL (Advanced), JavaScript/TypeScript (Advanced), C++ (Intermediate), Java (Intermediate), MATLAB (Advanced)

Specializations

Deep Learning, NLP, Computer Vision, Reinforcement Learning, MLOps, Data Engineering, Model Development, Data Analysis

## **Publications & Insights**

- "Attention-Based Multi-Modal Fusion for Medical Image Classification," IEEE TMI, 2022
- "Efficient Transformer Architectures for Resource-Constrained NLP," ACL, 2021

# **Certifications**

- AWS Machine Learning Specialty 2022
- TensorFlow Developer 2021
- Deep Learning Specialization 2021
- AI Ethics (Harvard & edX) 2023

# **Recognitions & Awards**

- 1st Place, CodeFest Hackathon (MedVision AI System) 2023
- 1st Place, AI Innovation Challenge (SmartGrid RL) 2024
- Kaggle Medical AI Challenge 1st Place
- Sustainability Award for reducing industrial carbon emissions by 25,000+ tons annually

# **Community & Open Source**

- Contributor to transformer-explainer and medical-vision-toolkit repositories
- Developed RL environment suite and NLP annotation tool

#### **Contact & Links**

- GitHub
- LinkedIn
- [Portfolio Website] (Your Website URL)