LUCAS BENNETT

2894 Bryant Street, San Francisco, CA, 94110 +1 (415) 555-2034 lucas.bennett.ai@gmail.com linkedin.com/in/lucas-bennett-ai

SUMMARY

I am an AI engineer and researcher with a strong track record of delivering robust, scalable, and impactful AI solutions. My experience spans end-to-end product development, from ideation and research to production deployment, across domains such as fraud detection, NLP, and computer vision. I thrive in collaborative, fast-paced environments, consistently driving projects that push the boundaries of AI while maintaining a strong focus on quality, reproducibility, and real-world impact. I am passionate about learning, sharing knowledge, and contributing to teams that value ambition, ownership, and ethical standards.

WORK EXPERIENCE

AI Engineer - DeepMetric Labs (Jan 2023 - Present)

At DeepMetric Labs, I designed and implemented a real-time fraud detection system using graph neural networks, reducing false positives by 34%. I spearheaded the deployment of robust ML pipelines using MLflow and Docker across distributed AWS infrastructure, ensuring our solutions were scalable and production-ready. I collaborated closely with data science and DevOps teams to streamline model testing and CI/CD, driving projects from ideation to production and delivering tangible business impact.

Machine Learning Researcher - NovaCortex AI (Sep 2020 - Dec 2022)

At NovaCortex AI, I developed a custom transformer-based architecture for sentiment-aware summarization, improving ROUGE scores by 17%. I published research in top-tier AI conferences (NeurIPS, ACL) and led internal workshops on explainable AI and model interpretability tools (SHAP, LIME). My work involved exploring new models and techniques, rapidly learning across domains, and sharing findings to elevate team capabilities.

PROJECTS

AutoPilotSim – Self-Driving Car Simulation Platform -

I built a reinforcement learning environment in Unity using ML-Agents to train agents on lane-following and obstacle avoidance. I integrated PPO and SAC algorithms with real-time telemetry visualization, demonstrating my ability to deliver complex AI solutions from concept to functional product.

FaceGuard – Deepfake Detection Tool -

I designed a binary classification model using EfficientNet and LSTM to detect facial manipulation in videos, achieving 94% accuracy on the DeepFake Detection Challenge dataset. I implemented Grad-CAM for interpretability and confidence heatmaps, ensuring transparency and trust in model predictions.

MedNerPro – Clinical Entity Recognition System -

I developed a deep learning pipeline for extracting medical entities from unstructured clinical notes, combining BiLSTM-CRF and BERT-based embeddings (BioBERT) to achieve a 91.3% F1 score on the i2b2 dataset. I integrated spaCy and Streamlit to create an interactive demo for real-time analysis, with a strong focus on data privacy and compliance.

EDUCATION

M.Sc. in Artificial Intelligence, University of California, Berkeley (2018 - 2020)

GPA: 3.9/4.0

B.Sc. in Computer Science, University of Washington (2014 - 2018)

GPA: 3.8/4.0

HARD SKILLS

Python • PyTorch • TensorFlow • scikit-learn • Transformers (HuggingFace) • OpenAI API • LangChain • Reinforcement Learning • Computer Vision • NLP • MLops: Docker • MLflow • Airflow • AWS Sagemaker • Git • Linux • REST APIs • SQL

SOFT SKILLS

Strong analytical and problem-solving mindset • Clear technical communicator • Passionate about learning and knowledge sharing • Excellent team collaboration and mentorship experience • Adaptable in fast-paced, agile environments