

Blake Peterson

MACHINE LEARNING ENGINEER

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An aspiring software and machine learning engineer who loves problem-solving, programming, and developing innovative ideas. Loves to research and work on personal programming projects.

Education

Brigham Young University, Provo, UT

Computer Science (BS) Machine Learning Emphasis

Mathematics Minor

GPA: 3.83

Extracurricular activities:

Leadership Competitive Programming Club

Participated in ICPC 2023 & 2024

Work Experience

Family History Technology Research Lab | Lab and Project Lead

2023-2025

- Led a team of 12 developers, managing projects, meetings, and training. Directed a handwriting recognition initiative with a 3-person team, building a pipeline for census record segmentation, transcription, and validation.
- Cut AWS costs by \$600-700/month by optimizing infrastructure. Deployed S3 static sites, load balancers, and DynamoDB tables using Terraform.
- Used a segmentation model for census records written with OpenCV (cv2) and TensorFlow, improving labeled training data for handwriting recognition.
- Built neural networks with TensorFlow and PyTorch, applied NLP strategies (RAG), and leveraged NumPy, Pandas, Hugging Face, and Scikit-learn for ML workflows.

BYU AI Archibald Group | Research Assistant

2024-Present

- Worked with other students on finalizing AI research papers and performing EDA.
- Utilized vector embeddings and cosine distance to optimize AI decision-making.
- Contributed to billiards RL project using a C++ environment, Python wrapper, and Stable-Baselines3.

Volunteer Experience

Missionary for Church of Jesus Christ of Latter-Day Saints

2019-2021

- Served as a missionary for 2 years and led groups of missionaries for the majority of that time doing community service and teaching the people of Los Angeles, CA about Jesus Christ.

Eagle Scout

2017

- Awarded Eagle Scout for a community service project I organized and led at a YMCA in Knoxville, TN.

Skills and Abilities

- Proficient in C++, Java, Python, JavaScript/TypeScript, HTML, CSS, SQL, and Rust languages.
- Knowledge of REST APIs, AWS, Database Design, and Object-Oriented-Programming.
- Organized, has leadership skills, and experienced in communicating and working with teams.
- Skilled in DevOps with Terraform, Vercel, and GitHub Actions for automated deployments.
- Excellent at using Git and Git CLI tools for version control.