

Joseph Brijs

joebrijs@gmail.com | joebrijs.dev | linkedin.com/in/joe-brijs

EDUCATION

Utah State University

Bachelor of Science: Computer Science

Expected May 2025

GPA: 3.72

EXPERIENCE

Student Software Developer and Research Assistant

Utah State University ASPIRE Lab

Nov 2024 - Present

Logan, Utah

- Conducting research and developing a Reinforcement Learning framework to optimize electric bus charging schedules, aiming to enhance efficiency and reduce energy costs across Utah's EV infrastructure.
- Integrating Python-based machine learning models into a Rust web API, enabling real-time predictions and ensuring seamless interaction between data pipelines and backend services.
- Designing and maintaining new features for an EV reservation web app using Express and React.js, improving user experience and system reliability.

Software Engineer - Intern

Elektrik

May 2024 – Nov 2024

Lindon, Utah

- Designed and implemented web app search tools for medium voltage accessories using Rust and Angular by analyzing datasheets and integrating part data, resulting in a 25% revenue increase over the previous year
- Reduced credit application time from days to minutes by creating an adaptive form and automating workflows via Slack and GCP Pub/Sub, generating PDFs, and integrating the process into the web app dashboard
- Led the transition from Angular to React, reducing the frontend codebase by 40%, improving UI/UX, and enhancing developer efficiency, resulting in a more maintainable codebase
- Contributed to a fast-paced early-stage startup environment, adapting to evolving requirements, taking on cross-functional roles, and directly impacting key product decisions and technical implementations

PROJECTS

Stock Price Neural Network Web App | *Python, PyTorch, Flask, React.js, AWS, Docker*

- Developed an automated data pipeline that collects stock price data, engineers features, and stores the data in Amazon S3 for real-time predictions
- Designed and trained LSTM neural networks to predict next-day stock prices for major tech companies
- Implemented AWS Lambda functions for automated data fetching and prediction after market close, scheduled via AWS EventBridge Cron jobs to ensure timely updates
- Created API endpoints using AWS Lambda and API Gateway to serve stock price predictions and compare actual vs. predicted prices
- Built a dynamic React web app to display stock predictions and performance metrics, hosted on AWS S3, integrated with CloudFront for CDN distribution, and managed DNS with Route 53
- This project is hosted at faangfinance.com

AI Workout-Plan Web App | *React.js, Django, TailwindCSS, Git*

- Developed a full-stack web application that enables users to create, store, and track workout plans, providing a seamless fitness management experience
- Integrated OpenAI Assistants API to offer both manual and AI-generated workout plans, allowing users to choose between custom or automated plan creation
- Designed an intuitive, dynamic UI that enables easy addition and editing of workout plans, enhancing user interaction and overall experience
- Source code can be found at github.com/jbrijs/swole-ai

SKILLS

Languages: Rust, JavaScript, Python, Java, HTML/CSS

Frameworks & Libraries: Angular, Actix Web, Django, React.js, Flask, Redux, Pandas, Numpy, PyTorch

Developer Tools: Git, AWS, MongoDB, Docker