Jonathan Brunt • Software Engineer

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Summary

A Software Engineer and Computer Scientist with a track record of delivering effective solutions across demanding technological, business, and educational landscapes. Possesses extensive knowledge of Artificial Intelligence, Machine Learning, fullstack web development, relational and non-relational databases, servers, hosting environments, and networks. Recognized for effectively managing team interactions and driving excellence in testing, quality assurance, and security concerns throughout the software development lifecycle.

Technology Skills

Programming Languages: Python, JavaScript, C
AI Engineering: Generative AI, Prompt Optimization, Vector Databases, Embeddings, LangChain, Fine-Tuning, Cloud Computing, LLMOps, Ethics, NLP, Computer Vision
Machine Learning: Deep Learning, PyTorch, fast.ai, Transformers, Diffusers, Gradio, MLOps, Data Science, Statistics
Fullstack Web Development: React, Next.js, Serverless Backends, Node, Express, Tailwind, Docker, Kubernetes, Project Management
Database Management: PostgreSQL, MongoDB
Version Control & Testing: Git, Chai, Jest, Mocha
Design: User Interface, User Experience, Adobe Creative Cloud
Infrastructure: Servers, Hosting Environments, Networks
Education: Curriculum Development, Pedagogy, Management

Professional Experience

Sensay - *Senior AI/ML Engineer*   8/2024 - Present
Remote: Full-Time

Architecting and developing AI/ML solutions for a fullstack application including NLP, image generation, and computer vision.

- Architected and currently developing an API using an uncensored open source LLM to extract features from complex unstructured data involving interpersonal relationships and individual memories
- Implementing advanced RAG techniques to improve the quality of GenAI responses
- Troubleshoot all AI problems with the RAG and LLMs involved in the core product
- Advise and assist senior management on technical matters and client interaction
- Researching and implementing advanced NLP, image generation, and computer vision techniques to build out the company's core product

BloomTech - *Instructor*   5/2024 - Present
Remote: Part-Time

Instructing an AI Productivity course for senior engineers and executives covering various topics such as LLM observability, RAG, tool calls, agents, multi-agent systems, and fine-tuning.

- Create and iterate on the core curriculum
- Lecture bi-weekly on various topics and technologies including LangChain, LangSmith, Langfuse, LangGraph, LangServe, and CrewAI.
- Supervise new instructors, assistants, and curriculum developers

Independent Contractor - *Senior Software Engineer*   9/2023 - 8/2024
Remote

Assisted an early-stage startup across its technology stack.

- Led the integration of LLM-based NLP to enhance product features and user experience
- Developed intuitive and dynamic user interfaces with Next.js
- Optimized embeddings and vector database operations to ensure efficient data handling and retrieval
- Integrated scalable serverless AWS functions to power AI-driven components, ensuring high performance and reliability

Mimo - *Curriculum Developer, Software Engineer*   2/2022 - 7/2023
Remote

Developed and maintained educational curriculum, leveraging AI technologies to enhance user experience and streamline curriculum development processes. Wrote internal technical documentation and pioneered new curriculum modalities.

- Fine-tuned and implemented GPT-3 for the curriculum development process
- Authored Mimo's inaugural technical article, which serves as a benchmark for the format and style of all subsequent company articles
- Responsible for extensive planning, developing, and review of new backend content developed for release to application users and bootcamp participants

Tadah Tech - *Software Engineer*   11/2019 - 2/2022
Remote

Developed and scaled fullstack applications while managing the UI team and collaborating with the design team, management, and clients.

- Implemented a custom internal software system to ensure that performance, best practices, accessibility, SEO, and the standards of a Progressive Web Application were all prioritized and that expectations were exceeded at all stages of development
- Planned and built production applications from inception through completion

BloomTech - *Software Engineer, Teaching Assistant*   6/2018 - 11/2019
Remote

In various roles, led and contributed to educational programs in Computer Science, focusing on programming languages (Python, JavaScript, C) and web technologies (React, Redux, Node, Express, MongoDB, SQL, HTML, CSS, LESS, jQuery, Bootstrap).

- Pioneered the Teaching Assistant program in the Computer Science Department, resulting in a 15% increase in student Sprint pass rates within three weeks
- As a Section Supervisor, supervised and mentored 40+ students and six Project Managers, improving the student passing rate from 60% to 98% upon completion of the didactic portion of the course
- Initiated and later led the Master Based Progression program, enabling 88% of students to meet an 80% passing standard and progress to capstone projects and graduation
- Conducted daily one-on-one consultations as a Project Manager, including code reviews and skill development, leading to 100% of students achieving an 80% passing standard on all weekly exams

- Collaborated in developing and revising course content, enhancing both theoretical understanding and practical skills for multiple student cohorts

BPM Marketing - *Software Engineer*   8/2018 - 11/2018
Remote

Hired on a temporary, part-time basis to develop, maintain, and scale a portfolio of fullstack websites and applications for clients.

- Scaled the server of a movie premiere website in production to reach 15 million consumers via email to promote the online release date, while simultaneously building out the front-end
- Improved the user interface and user experience of multiple client sites

Independent Consultant - *Web Developer*   8/2017 - 8/2018
Houston, TX / Remote

Executed multiple fullstack development projects for independent clients.

Education

University of Texas Health Science Center, Houston, TX
Public Health / Epidemiology / Biostatistics