Joshua Jarabek

Full-Stack Software Engineer

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Summary

Innovative and driven professional with a strong background in computer science, sales, and entrepreneurship. Proven track record of success in developing cutting-edge technology solutions and founding startups. Skilled in full-stack web and mobile development, building scalable applications using modern technologies, and implementing complex algorithms for personalized user experiences. Expert in graph databases and recommendation systems.

Education

Bachelor of Science in Computer Science, Western Governors University – 2022

Bachelor of Business Administration in Marketing, Texas Tech University – 2018

- Minor in Philosophy
- Member of Delta Sigma Phi fraternity

Experience

Founder, Solstice (Apple Exclusive Dating App)

May 2024 – Present

- Developed an innovative 18+ dating app exclusively for Apple users, integrating advanced astrological and personality matching algorithms.
- Implemented complex calculations using Swiss ephemeris and Numpy for 46 personality traits, enhancing user compatibility matching.
- Designed and deployed a Neo4j Cluster on Azure VM Scale Sets for efficient graph database management and scalability.
- Leveraged Neo4j for sophisticated recommendation systems, implementing:
  - Follow suggestions based on multi-level relationship analysis (follow of followers, follower of follows, follows of follows)
  - Personalized "For You" post and video feeds
  - Dating feed recommendations
  - Content suggestions based on user interaction history (likes, quotes, swipes)
  - Recommendations incorporating personality scores and astrological compatibility
- Utilized Neo4j's graph algorithms for efficient traversal and pattern matching in large-scale social networks.
- Optimized query performance for real-time recommendations in a high-traffic environment.
- Built a robust backend using FastAPI, ensuring high performance and scalability for user interactions and data processing.
- Developed the frontend using SwiftUI, creating an intuitive and engaging user interface for iOS, macOS, iPadOS, and tvOS.

- Integrated Apple Authentication and Apple Music API for seamless user experience and personalized music sharing.

- Implemented real-time notifications using event-driven architecture with Kafka, delivering updates via push notifications and web sockets.

- Accepted into the Backdrop Build startup accelerator (v5 wave), gaining valuable mentorship and resources for startup growth.

Founder, Parakeet

March 2023 – May 2024

- Developed an AI-powered EdTech platform for higher education, incorporating automated note-taking, context-aware intelligent assistants, and AI grading for rubric-based assignments using advanced machine learning techniques.

- Built a scalable web application using SvelteKit (Node.js), optimizing performance through efficient coding practices and framework capabilities.

- Implemented an audio/video processing farm using FFMPEG and Python, enhancing lecture AV processing and streaming efficiency with robust scripting and automation.

- Designed and developed backend microservices, including authentication/authorization APIs and virus scanning using FastAPI, ensuring secure and reliable service architecture.

- Utilized RabbitMQ clusters for task queues and messaging between microservices, implementing a robust and scalable messaging system.

- Employed Kubernetes on Azure VM Scale Sets for canary deployments and high availability, integrating GitHub Actions for seamless CI/CD pipelines.

- Implemented Redis clusters for cache management and NGINX for web servers, optimizing data retrieval and server performance.

- Utilized Azure Blob Storage for secure file storage and MongoDB and MySQL for database management, ensuring scalable and efficient data handling.

- Followed best practices for OOP design patterns and used Docker for containerization, enhancing modularity and deployment efficiency.

Senior Marketing Consultant, MultiView

February 2020 – November 2020

- Achieved top-performing sales status by effectively selling newsletter ad placements to small businesses in B2B newsletters through targeted outreach and personalized sales strategies.

- Managed the entire sales process, from cold calling to closing deals, by implementing strategic sales techniques and maintaining a high conversion rate, consistently exceeding sales targets.

Sales Development Representative, Hewlett Packard Enterprise

March 2019 – November 2019

- Collaborated with partners such as CDW and SHI to secure high-value meetings for Account Executives in the Northern California territory by leveraging strong relationship-building skills and targeted outreach.

- Specialized in storage solutions, including Nimble storage, while also successfully booking meetings for servers and networking products through deep product knowledge and persuasive communication.

- Consistently achieved monthly sales targets by developing and executing effective sales strategies, maintaining a thorough understanding of product offerings, and fostering strong client relationships.

Skills

Full-stack web development: Svelte, Node.js, SvelteKit, Azure, HTML/CSS, JavaScript, TypeScript

Mobile and cross-platform development: SwiftUI (iOS, macOS, iPadOS, tvOS), iOS app development

Backend development: Node.js, FastAPI, Python, RabbitMQ, Kubernetes, Redis, NGINX, Kafka

Database management: Neo4j, MongoDB, MySQL, PostgreSQL, SQL

Graph databases and recommendation systems: Neo4j, graph algorithms, pattern matching, social network analysis

Cloud services: Azure VM Scale Sets, Azure Blob Storage

Data processing: Numpy, Swiss ephemeris

Other skills: Docker, GitHub Actions (CI/CD), OOP design patterns, Agile methodologies, Project management

Business skills: Entrepreneurship, Sales and marketing, Startup accelerator experience

Certifications

CompTIA Project+