Eric Hao

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EXPERIENCE

BibleGo.org, Cleveland Heights, OH

Software Engineer Project Lead

BibleGo.org is a web application that helps people study the Bible by presenting time-tested commentaries in a digestible way. It creatively uses AI to produce commentary summaries which serve as appetizers to the commentaries themselves.

- Deliver BibleGo.org to hundreds of active users by translating high-level vision into well-defined user-centered features, bringing the entire project from initial conception to live product in 6 months
- Automatically generate and evaluate thousands of commentary summaries by developing a custom AI pipeline and fine-tuned quality scoring metric using Python, ChatGPT, and NLP (NLTK, TensorFlow, scikit-learn, spaCy, Stanza)
- Build, present, user-test, and deploy key website features by leading a team of developers, UI/UX engineers, and volunteers, and incorporating ideas and feedback from a board of experienced Bible scholars each week
- Develop and maintain a production-ready codebase and deployment pipeline using **Typescript**, **Next.js**, **Tailwind**, **Vercel**

Microsoft, Azure Compute Services, Redmond, WA

Software Engineer, Software Engineer II

The Allocator team specializes in building complex microservices which allocate millions of VMs per day in the cloud.

- Reduced concurrent collisions and retries by over 50% in busy regions by implementing a now patent-pending collision avoidance algorithm that pseudo-randomly allocates computing resources to reduce placement conflicts: Patent # US20230362103A1 – Reducing Placement Conflicts Between Concurrent Virtual Machine Allocations
- Designed, built, and deployed core cloud infrastructure services that perform millions of VM placement decisions per day
- Advanced scale capabilities by delivering performance improvements based on detailed analysis of terabytes of data, designing improved monitoring systems, and streamlining hotfix and patch deployment procedures
- Coordinated with several teams to organize and create a workflow enabling dedicated and reserved capacity
- Contributed extensively to several large (50+ GB) repositories using .NET, C#, PowerShell, Git, and Azure DevOps
- Answered, investigated, mitigated, and resolved urgent customer-impacting incidents as part of an all hours on-call rotation

LEADERSHIP & VOLUNTEERING

Great Lakes Christian College Summer Retreat, Lead Coordinator

The lead coordinator is responsible for organizing a week-long event with hundreds of participants and volunteers by selecting and working with 15 planning team coordinators, communicating with retreat property managers, and managing real-time event needs.

Journey Learning Studio, Instructor (Programming Projects with Python)

The Python programming instructor is responsible for delivering an 8-week high school summer course, designing custom lesson and homework materials from scratch, and teaching weekly 1-hour classes with Zoom, Google Classroom, and repl.it.

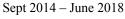
Microsoft Software and Systems Academy (MSSA), Mentor	Jan 2022 – May 2022
Mentors in Tech (MinT), Mentor	Nov 2020 – June 2021
CodeDay Labs, Project Mentor	June 2020 – Aug 2020

SKILLS

Programming: C#, Python, Java, C, C++, Lisp, Scala, HTML, CSS, JavaScript, TypeScript, PowerShell, Bash, KQL, SQL Tools: Git/GitHub, .NET, Azure DevOps, Vercel, Kusto, Kafka, Unity, Next.js, React, Linux

EDUCATION

Northwestern University, Evanston, IL B.S., M.S. Computer Science, McCormick School of Engineering and Applied Science, Magna Cum Laude



Aug 2023

June 2022 – Aug 2022

Sept 2018 – Aug 2022

July 2023 – Present