Ben Gubler

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EDUCATION

B.S. in ACME (Applied & Computational Mathematics Emphasis), B.A. in Arabic May 2027
Brigham Young University *Provo, UT*

- Cumulative GPA: 3.94
- Full-tuition Heritage Scholarship from BYU
- Relevant Coursework: Software Engineering; Math 213, 215 (Linear Algebra); Math 290 (Proofs); Advanced Artificial Intelligence (CS 474)

TECHNICAL SKILLS

Web Development: Node.js, JavaScript, TypeScript, React, Next.js, Vite, Tailwind, HTML/CSS
Machine Learning: PyTorch, PyTorch Distributed, HuggingFace Transformers, HuggingFace Accelerate, FSDP
Other: Ubuntu, Git, Bash, Docker, enroot, SLURM, Python, C++, Rust, Java, SQL, GitHub Actions

WORK EXPERIENCE

Artificial Intelligence Research Assistant Mar 2023 - Present
Perception, Control, and Cognition Lab (BYU) *Provo, UT*

- Built a scalable pipeline for pretraining small LLMs on a supercomputing cluster, leveraging PyTorch Distributed, Enroot, SLURM, Wandb, OmegaConf, and Eleuther's lm-evaluation-harness
- Wrote a training loop to fine-tune Meta's LLaMA 70B using only 8 GPUs by utilizing FSDP
- Learned to use our cluster of 80 A100 GPUs across 8 nodes using SLURM and enroot, taught coworkers, and wrote documentation
- Designed and executed experiments using LLMs to simulate human respondents and evaluate their perspectives

Software Tester Jul – Oct 2020, Dec 2022 – Mar 2023
Oncurrent, Inc. *Provo, UT*

- Wrote automated end-to-end tests for our web application using Cypress
- Manually tested the application, filed 300+ issues, and contributed fixes

PERSONAL PROJECTS

Eta (eta.js.org) | *TypeScript* Mar 2020 - Present
- Automated testing and code coverage reports using CI on GitHub Actions
- 1.5K+ GitHub Stars and 1M weekly downloads; powers Facebook's Docusaurus doc generator

Personal Website (bengubler.com) | *Next.js 14, Tailwind, MDX* Mar 2017 - Present
- My personal website, where I post about languages and artificial intelligence

Decline App (decline.vercel.app) | *Next.js, PWA, Tailwind* Mar 2022
- App for practicing Czech, Slovak, and Russian declension patterns

TinyLingo (tinylingo.com) | *Next.js, Supabase, Stripe, Tailwind, Zod, OpenAI* Nov 2023 - Present
- App for language learning using parallel texts (translations generated by AI)
- Accepted into Microsoft for Startups Founders Hub program

npm-to-yarn (npmjs.com/npm-to-yarn) | *TypeScript* Mar 2020 - Present
- npm package to convert between npm and Yarn CLI commands

SERVICE

Volunteer Service Representative Oct 2020 - Nov 2022
The Church of Jesus Christ of Latter-day Saints *Texas; Czechia; Slovakia*

- Organized and taught free English classes, helped local city government process travel documents of Ukrainian refugees

Volunteer Teacher Mar - Jul 2023
Kids Who Code *Provo, UT*

- Taught free weekly programming lessons in Python to elementary-age children

ADDITIONAL

Languages: Fluent in English, Czech; conversational in Slovak; basic proficiency in Russian, Arabic
Awards: AP Scholar Award (2019); Philo T. Farnsworth Governor's Award for innovation (2020)
Hobbies: Classic literature, rock climbing, open-source, poetry, backpacking, pickleball, language learning
Courses: 'Neural Networks: Zero to Hero' by Andrej Karpathy
High School: ACT — 36, GPA — 3.95