Benjamin Gwynn | CV 2024 | draft 1

Software engineer captivated by the endless possibilities and evolution of web technologies. I find great joy and satisfaction in optimizing backend performance, unraveling the complexities of new web paradigms, and employing innovative strategies to boost efficiency.

Objective

I am seeking a challenging role to leverage technical expertise and leadership skills in web technology projects. Eager to bring my robust understanding of backend optimization and web technology paradigms to a forward-thinking team, where I can contribute to delivering high-quality and efficient software solutions.

Technical Skills

- Expert in Typescript/Javascript/node.js.
- Strong experience with the modern web platform and frontend frameworks including Vue, React, and Svelte.
- Highly knowledgeable in handling various databases, both SQL (Mysql, Postgresql, Rethinkdb) and NOSQL (MongoDB, Cloud Bigtable).
- Skilled in Git, contributing to personal and open-source repositories on Github.
- Experienced in administering RHEL, Debian, and Ubuntu servers also, have a good handle on Linux system administration using tools like systemd and bash scripting.
- Comfortable and proficient in working with other languages; C#, Python, Java.
- Comprehensive knowledge in constructing and maintaining CI/CD pipelines and developing effective automated testing strategies.
- In-depth knowledge in managing and operating Microsoft Azure, Google Cloud Services, and AWS.

<small>Committed to continuous learning and adaptation of new languages and frameworks.</small>

Soft Skills

- Exceptional leadership and entrepreneurial abilities exhibited as a Full-stack Freelance Developer.
- Convincing decision-making skills demonstrated by the strategic implementation of modern technical tools and methodologies.
- Strong technical communication abilities showcased by contributions to several development forums.
- Proven strategist, focusing on company-wide improvements in development and project management systems.
- Committed advocate for modern practices in the software development process.
- Experienced trainer, standardizing the team's peer review process.

Work Experience

DataCapture Ltd. (2022-2024)

- Lead the design and development of "Designer," a cutting-edge web app enabling direct manipulation of Svelte source code files through an intuitive WYSIWYG graphical interface
- Implemented a high-performance build & deployment application using Docker and esbuild, drastically reducing update cycles, decreasing onboarding time for server maintenance and enhancing efficiency.
- Initiated and headed the transformative restructuring of our system's backend into two separate processes: Data Acquisition System (DAS) and Core. This pioneering model allowed for more efficient web requests and probing/data storing, facilitating enhanced network scalability. This model permitted individual DAS units to monitor specific devices and utilized a robust communication relationship between DAS and Core using UDP datagrams and websockets. This major project not only enhanced system functionality but also retained the flexibility for local or multi-server application.
- Improved the development experience, adding a hot-reloading feature in both the web server and web frontend. This adjustment fast-tracked the development process by reloading the system automatically upon file changes.
- Led the development of a custom CI/CD solution, which significantly upgraded our project management system by providing a comprehensive history of unit test failures and creating a standardized testing environment.
- Spearheaded the overhaul of our session handling system and introduced standard practices such as cookie signing to enhance security.
- Ported across languages, from JavaScript/Python 2 to Typescript, and React to Svelte.

Other Experience

- Junior Developer at Lincoln Student Union (2020), where priorities included team communication, documentation creation, and PHP code review.
- Full-stack Developer at Benjamin Gwynn Design (2015 - 2018), a freelance experience during which I lead various projects including an interactive HTML5 maths worksheet editing tool - the 'Worksheet Canvas'. The project laid the foundation for my later contributions to DataCapture's Designer tool.
- Provided support at Ikona IT Ltd. (2014) as part of a temporary role aiding local companies with their Windows-based IT infrastructure.

Education & Training

- BSc Computer Science, University of Lincoln (2018 - September 2021) First-class honors
  - Dissertation: "pkgnet: A Decentralized Package Manager for Linux Code Repositories"
    - Conducted a comprehensive analysis and developed a solution to enhance Linux software distribution efficiency using a peer-to-peer networking model.
    - Designed and implemented a standardized method for building and sharing pre-compiled software binaries, promoting a scalable, secure, and independent distribution mechanism.
    - Demonstrated the potential of a decentralized approach in reducing dependencies on centralized servers and handling version control disparities across Linux systems.
    - Employed Node.js and WebTorrent technology for the development of the pkgnet daemon (`pkgnetd`) and CLI tool (`pkgnet-cli`), ensuring cross-platform compatibility and leveraging modern web technologies.
    - The project underscored the significance of compiler optimizations and the strategic management of package releases, aiming to streamline the software delivery process for Linux environments.
  - Modules included: Cloud Computing (with Google Cloud), Machine Learning, Big Data,

Network Fundamentals, Parallel Programming, Logic & Computation.

- Microsoft Certified: Azure Fundamentals (2020)
- CertHe Computer Science (2019) - First
- WJEC A-Levels inc. Computing and Electronics (2016)

<small>References are available on request.</small>