Christopher Perkins

Full-Stack Software Engineer

✉ Christopher@Perkins.guru   ○ Christopher-R-Perkins   in Christopher-R-Perkins   ◉ Easton, PA

SUMMARY

Full-stack software engineer focused on improving developer experience. Launched features for ZenML's Visual Studio Code extension and co-created Reverb, an event-driven workflow engine. Automated a task at Stefanini, cutting diagnostic time by 90%. Thrives in collaborative environments and continually learns new technologies. Enjoys painting miniatures and hiking.

TECHNICAL EXPERIENCE

Open Source Contributor, *ZenML* ✎   July 2024 – August 2024
- Enhanced **Python** integration by adding features to the language server, enabling interaction between the **TypeScript** extension and ZenML client.
- Implemented **Directed Acyclic Graph (DAG)** rendering feature in **Visual Studio Code**, allowing developers to visualize DAGs within a Webview Panel.
- Enabled management of custom ZenML stacks and components via user-friendly forms, cutting setup complexity by 30% and reducing errors from manual CLI entries.
- Fixed real-time monitoring issue, improving ZenML environment change detection by **watchdog** accuracy to 100%.
- Resolved API compatibility issue, enabling extension functionality with newer ZenML clients.

Co-Creator, Software Engineer, *Reverb (reverb-app.github.io)* ✎   January 2024 – June 2024
Reverb is an open-source, event-driven asynchronous workflow engine handling 100+ events per second.
- Architected **AWS**-hosted **Node.js** microservices for event ingestion, workflow mapping, and step execution.
- Simplified **AWS** deployment with the **CDK**, reducing a complex 152-step process to a single command.
- Improved local testing and deployment with **Docker**, creating a unified environment for developers.
- Designed a **TypeScript** SDK for scripting custom multi-step workflows, enhancing the developer experience.
- Automated deployment with **Github Actions**, transforming a 4-step manual process into an automatic workflow.
- Used **MongoDB** for logging and **PostgreSQL** with **Graphile Worker** for queue management, enhancing Reverb's event processing.
- Built an **OCLIF**-based CLI tool to centralize interaction with **REST APIs** and deployment.

Deskside Technician | Software Developer, *Stefanini*   December 2021 – January 2024
Provided technical support at Nike's logistics operations, maintaining sub-15 minute response times.
- Developed software to detect duplicate print jobs on Zebra ZT610 using **.NET Core**, reducing diagnostic time by 90%.
- Improved accuracy of paper orders by using **.NET Core** to poll Zebra printers and calculate how much paper was used over time.

Independent Maker & Engineer, Arduino Tools, *Self-Employed*   2020 – 2021
Designed and sold custom Arduino tools to a hobbyist community, managing all aspects from fabrication to programming and sales.
- Developed custom shields for the **Arduino Leonardo** and reverse engineered Arcade1Up control panels to interface with PCs using **C++** software.
- Fabricated and sold small batches of Arduino-based tools, overseeing product design, programming, and direct person-to-person sales.

SKILLS

Backend	Frontend	Cloud	Other
Node.js, Ruby, Python, .NET Core, SQL, PostgreSQL, MongoDB, REST APIs, Express.js	*JavaScript, TypeScript, React, HTML/CSS, handlebars, Cypress*	AWS: EC2, ECS/Fargate, Lambda, CloudFormation, CDK, S3, IAM, RDS	*Git, Github, Docker, Nginx, Linux, Jest, Object Oriented Programming (OOP)*

EDUCATION

ITT Technical Institute,   March 2005 – March 2007
AAS Computer and Electronic Engineering Technology