Paul Hazen | Software Engineer

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I am a driving force in creating exceptional software experiences that leave customers enamored. My goal is to empower, inspire confidence, and elicit pure joy in the users of software I help create. A strong passion for collaborative success and deliberate personal empathy for those I work with make me a valuable member of any team.

SKILLED	C, C++, Python
INTERMEDIATE	Rust, Java, JavaScript, PHP, Visual Basic, PowerShell, SQL, NoSQL
TOOLS & TECHNOLOGIES	Git, SVN, TensorFlow, Hyper-V, Azure, AWS, Linux, Jupyter, Jenkins, deep learning, neural networks
HOBBIES	Creative writing, woodworking, hard science fiction, board game parties

Education

Senior at DigiPen Institute of Technology, graduating in 2023 with BS in Computer Science and Machine Learning   GPA: 3.47

Academic Projects

Timesink (Project Team) - *Programmer, Tech Lead, & Build Master* —————— 2020-2023

- Successfully established robust game engine architecture, expertly led interdisciplinary team, and ensured success through decisive coordination across departments.
- Actively implemented continuous integration of code via GitHub Actions, effectively preventing new errors, warnings, or regressions, and ensuring constant measurable progress in project development.
- Established and strictly enforced a policy of two-developer reviews and resolution of all issues before pull request approval, propelling the team to achieve milestones and exceed expectations.
- Designed serialization strategy utilizing reflection in conjunction with JSON to deliver a data-driven game engine.

Image Processor - *Individual Computer Vision Project* —————— 2022

- Demonstrated my ability to learn a new language quickly and effectively, I chose to implement my coursework in Rust, developing an application that included common computer vision tasks.
- Implemented histogram equalization of images, smoothing and sharpening filters, FFT, CCL, logarithmic and gaussian filters.
- Engineered feature to enhance astrophotography images using compounding image stacking algorithms.

Work Experience

Program Manager Intern - *Microsoft* —————— June 2014 to September 2014

- Developed datacenter disaster recovery plan prioritizing compute load recovery based on customer type, creating an algorithm that queried large, distributed databases to determine a rank for all compute tenants.
- Empowered disaster recovery team to quickly identify and evict resources to achieve capacity for recovering SLA-bound tenants during a disaster and defined the recovery order for SLA-bound tenants.
- Maximized usage of compute resources using smaller units of virtualization such as container technology like Docker.
- Worked across teams with respective principals to identify where and how critical customer tenant data is stored as part of the process to validate the integrity of the data that ultimately informs disaster recovery operations.

Android Developer - *Above Average Outcomes* —————— May 2013 to August 2013

- Contributed to high performance race car operation through by creating portable solutions to measure the weight distribution of a vehicle using Android device and custom scales.
- Collaborated with hardware designers to deliver software module handling low-level multi-threaded processing data over USB and Bluetooth protocols.
- Designed logic abstraction for expansion of existing protocol, while maintaining compatibility for legacy devices.
- Lead educational discussions, introducing managed languages to the hardware team, including discussions on best practices and industry standards, in contrast with machine code. In exchange, I learned similar information about hardware design principles.

Software Development Engineer Intern – *Amazon* ——————— June 2012 to September 2012

- Composed a precise technical plan for improving the API set for Amazon's "Webstore" product by integrating immediate customer feedback with long-term business goals.
- Delivered an updated API that provided customers with greater functionality and increased security.
- Provided developer-centric feedback to peer level Program Management on a 2–3-year plan to transition the existing product to a more modular and agile design that better met the goals of the business.

Mobile Phone Developer – *Subsplash Consulting* ——————— July 2010 to February 2012

- Ported the two most profitable applications in our portfolio from iPhone to Windows Phone.
- Developed and released the flagship application on the Windows Phone platform.
- Collaborated directly with largest client to build unique Bible application for the Windows Phone platform.