Paul Hazen

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I will be a driving force in creating software experiences that impact as many as possible. I strive to see empowered, confident, delighted users. A strong passion for collaborative success, and deliberate personal empathy for those I work with make me a valuable member of any team.

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| Languages | Skilled | C, C++, Python, Rust |
| Intermediate | Java, JavaScript, PHP, Visual Basic, PowerShell, SQL, NoSQL |
| Tools & Technologies | | Git, SVN, TensorFlow, Hyper-V, Azure, AWS, Linux, Jupyter, Jenkins |
| Hobbies | | Creative writing, woodworking, hard science fiction, board game parties |

# **Education**

Senior at DigiPen Institute of Technology, graduating in 2023 with a BS in Computer Science and Machine Learning.

# **Academic Projects**

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| Timesink (Project Team) – *Build Master, Tech Lead, & Programmer* | 2020-2022 |
| * Set vision and direction of game engine architecture through collaboration with key stakeholders across codebase. * Designed solutions for current feature requests, as well as preparing for expected feature requests without compromising on premature optimization. Maintained team focus on deliverables starting with MVP for individual features. * Designed and executed upon serialization strategy utilizing runtime reflection in conjunction with JSON to deliver a data-driven game engine. * As Build Master delivered continuous integration of code via GitHub Actions – ensuring no pull requests get approved that introduce new errors, warnings, or regressions, allowing for constant measurable forward progress on project development. Additionally established a policy of allowing pull requests only after being reviewed by two other developers, and having all issues resolved. | |
| Image Processor | 2022 |
| * Taught myself to use Rust, a language that was new to me. * Wrote an application that demonstrated all the concepts explored in a computer vision course, such as connected component labeling, image manipulation through application of filters such as Log, Gamma, and Gaussian. * Implemented histogram equalization of images, smoothing and sharpening filters, and fast Fourier transform. * Engineered feature to enhance astrophotography images using image stacking algorithms. | |

# **Work Experience**

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| --- | --- |
| Program Manager Intern – *Microsoft* | June 2014 to September 2014 |
| * Developed Datacenter disaster recovery plan that prioritized compute load recovery based on business relationship with customer. This involved creating an algorithm, implemented in PowerShell, that queried large and distributed databases and ranked compute tenants with respect to their customer type. * Empowered the disaster recovery team to rapidly identify evict-able compute resources to achieve capacity for recovering SLA-bound tenants during a recover and define the order in which SLA-bound tenants would be recovered. * Identified opportunities to maximize usage of compute resources using smaller unites 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 |
| * 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 |
| * Set vision and drove the production of porting the two most profitable applications in our portfolio from iPhone to Windows Phone. * Accountable for and delivered upon the flagship application on the Windows Phone platform. * Collaborated directly with largest client to build unique bible application for the Windows Phone platform. | |