

Jesse M. Porch

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Full Stack Software Developer with a superb attention to detail and extensive experience in all phases of the software development lifecycle. Comfortable with diverse technologies, design methodologies, and on-the-job learning. Committed to the success of the team and reliably meeting customer's needs through collaboration and initiative. Effective communicator to both technical and non-technical audiences.

Core competencies: Full Stack Web Development. Database Architecture and Administration. Agile Project Management (*Certified ScrumMaster*). Test Plan Creation and Execution. Data Analysis. Research, Writing, and Editing.

Work Experience:

Harvard Law School | Cambridge, MA | Summer 2016 – Present

Application Developer, Business Solutions (Software customization and support for the HLS community)

- **Full stack development and integration** of a diverse systems necessary to support HLS operations.
- **Engaged with projects in all phases of software lifecycle:** discovery, initial implementation, active support, and mature system maintenance.
- **Acted as ScrumMaster for multiple sprints and projects**, including major overhaul of SIS server cluster corresponding application stack.
- **Flexibly shifted between diverse technology stacks and development environments** depending on project.
- **Pioneered and led ongoing initiative to retrofit existing applications for WCAG-AA compliance** and to ensure that new initiatives were compliant from initial release.
- **Collaborated with HLS Security Officer to triage and remediate critical security vulnerabilities** in HLS website.
- **Effectively balanced emergency triage with strategic projects**, evaluating critical support issues to determine appropriate resources to leverage to resolve in a timely manner without impacting ongoing work.

Haywire Magazine | <http://haywiremag.com> | Spring 2016 – Present

A bi-monthly games culture blog collective offering a shared space for critics outside the traditional publishing system.

Columnist, Guest Writer, Editor, WordPress Administrator

- **Wrote monthly column (*Playing for Real*)** integrating videogame topics with social and philosophical ones.
- **Provided writing and editorial support** for other columns and features.
- **Assisted with site administration** and other technical tasks.

Trinity Fellows Academy | Royal Oak, MD | Fall 2015 – Summer 2016

Interdisciplinary research fellowship dedicated to equipping emerging leaders for engagement in today's world.

Research Fellow

- **Organized and oversaw 3 conferences** of 50+ guests, coordinating among 8 teams to ensure all were able to complete assigned tasks. Tracked budget and scheduled work shifts for 12 fellows and additional help.
- **Performed independent research** and authored a thesis and supplemental essays. (*Portfolio*)
- **Hospitably welcomed hundreds of guests** of the *Osprey Point Retreat and Conference Center* through service, kitchen support, and housekeeping duties. Prepared monthly work schedule to fairly distribute shift assignment.

InterSystems Corporation | Cambridge, MA | Summer 2011 – Summer 2015

Database technology company whose Caché database powers major providers of electronic healthcare records around the world.

Application Developer, Application Services (Internal Tools Development)

- **Performed full stack development of mission-critical applications** for internal departments.
- **Prepared comprehensive system specifications**, design documentation, deployment plans, and testing plans to ensure the safe and reliable deployment of code.
- **Defined and published core tools library** and related best practices used throughout the company.

- **Supported company-wide rollout of team's agile workflow** through documentation and training in key software and practices.
- **Mentored 5 interns**, coaching them to the successful completion and deployment of projects using standard internal development, documentation, and revision control methodology.

Grove City College | Grove City, PA | Summer 2010

Private liberal arts college. The Sweezy Fund provides resources for the pursuit of research projects with qualified undergraduates.

Sweezy Research Fellow

- **Developed a complete integer ray tracing pipeline** using C++ and low-level assembly programming on specialized hardware.
- **Designed and implemented tools and library code** to support ongoing efforts in advanced ray tracing research.
- **Published a peer-reviewed paper** based on work in conjunction with team of researchers. ([Full Text](#))

Selected Projects:

Helios | Application Developer, ScrumMaster

Harvard Law School internal Faculty and Student Information System's web interface. Implements an extensive Data Model layer to connect HLS business processes with the SIS vendor's internal database structure. Uses a mixture of formal API access and direct database queries, with a variety of caching and lazy-loading strategies to efficiently handle variable loads. (C#, ASP.NET, HTML, JavaScript)

Faculty Bibliography | UI Implementation, WordPress Integration

[Public interface](#) for searching Harvard Law School faculty scholarship. Backend server crawls common publication targets for faculty work, which is then verified and properly cited before being indexed in Elasticsearch. WordPress plugin provides public access and faceted search. (PHP, HTML, JavaScript)

Amazon Glacier Media Archive Manager | Application Developer

Researched, designed, and implemented tool for handling the archival process for Harvard Law School's extensive Media Services library. Script is a configurable tool that monitors a folder and archives its contents to a specified AWS Glacier Vault. Successfully deployed for additional projects beyond its initial use-case due to flexibility in my original design. (Node.js, AWS-CLI)

Change Control Record | Application Developer

Internal comprehensive workflow management web interface. Used to track all software changes from beginning of work to production deployment, ensuring changes are comprehensively documented and follow best practices for version control and peer review. Personally worked on workflow implementation and Perforce source control integration. (InterSystems Caché Server Pages, HTML, JavaScript)

Hermes | Project Lead, Documentation Editor, Mercurial Integration

Team collaboration plugin for Microsoft Visual Studio 2010 built on Mercurial distributed source control
Provided simplified GUI and basic automation for core version control tasks from within the Visual Studio user interface
Windows Forms (C#)/Visual Studio Plugin

Tangere | Research Assistant, Paper Co-author, and Editorial Assistant

Cross platform, template-based fixed/floating point ray tracing system ([Source Code](#))

Testbed for research performed by Sweezy Research Fellows in the CS department at Grove City College

Contributed to fixed-point math library and core ray tracing engine (C++)

Education:

B.S., Computer Science, Hopeman School of Science, Engineering, and Mathematics
Grove City College | Fall 2007 – Spring 2011