SUMMARY

Technical software development manager working as a hybrid developer / team manager. Software developer with 20 years experience designing and developing modern web application platforms, modeling and simulation software, system architectures, research and development projects, iOS mobile apps, and large deployments on the cloud in use daily by customers. Adept at visual design and user experience.

Skilled at communicating with C-level executives and leading a group of developers with a product vision using an agile process, continually designing and developing delivered software products.

EDUCATION

- Bachelor of Science, Computer Science, Carnegie Mellon University, 1998
- Bachelor of Science, Physics, Carnegie Mellon University, 1998

EMPLOYMENT EXPERIENCE

- Haystax Technology June 2014 to present VP, Software Development
 - Designed, managed, developed, deployed, and maintained a modern web application platform stack for multi-tenant, multi-app delivery of public safety and threat intelligence functions using AngularJS, Python, Flask, JavaScript, HTML5, REST APIs, MongoDB, and deployed on a Linux cluster on AWS (https://constellation.haystax.com/) as well as disconnected on-premises installation
 - Lead the team and worked on a massively scalable Bayesian analytics engine platform built using Python, Celery, MongoDB, Docker
 - Release manager on three parallel product offerings, wrote documentation, updated servers
 - Implemented CI process to integrate Git, unit tests, and both manual and automated QA functions
 - Utilized an Agile Scrum process with continual deployment of software updates to the cloud
 - Communicated with C-level executives and customers to refine roadmap and share product vision
- Digital Sandbox, Inc. December 1998 to June 2014 acquired by Haystax - Founding employee, VP, R&D
 - Designed and developed a streaming unstructured threat analysis platform using Storm, NLP, MongoDB, Python, jQuery and deployed on AWS (https://watchboard.haystax.com/)
 - Lead Mobile platform development for iOS devices (four distinct production apps)
 - Directed product development in the Advanced Products Group (to support company (research and development)
 - Senior developer on the ASP.NET Site Profiler and Risk Analysis Center (RAC) web applications
 - Senior developer on the Site Profiler risk management tool and enterprise Information Management System (early PHP web server application)
 - Architect and lead developer of SOAP-based data synchronization tool (connects UNIX server product and client tools)

- Lead developer and project leader for web-based distance learning delivery, authoring, and management software using PHP and MySQL; trained over half of a million users in one year (three million to date) (at-awareness.org)
- Developed applications for the Palm Computing platform, including an implementation of the OpenGL graphics library for the Palm OS (miniGL)
- Developed custom 3D engine for a PC-based anti-terrorism planning tool using C++, OpenGL
- Founding employee
- 7b5 Labs, Inc. (7b5labs.com) March 2009 to present Co-founder, General Partner
 - Developed XPilot for the iPhone
 - Developed Subatomic for the iPhone
- Sonalysts, Inc. June 1998 to June 1999 Software Developer
 - Computer graphics programming in OpenGL for 3D gaming applications
 - Real-time computational fluid dynamics research in the area of smoke propagation and volumetric rendering

TECHNICAL EXPERIENCE

- Software Development
 - Full-stack from backend data to frontend user experience
 - Delivered production software in Python, Javascript, Objective-C, C++, C, PHP, C#, and Java
 - Web services (REST, SOAP, XML-RPC, .NET)
 - Mobile app development, iOS SDK using XCode
 - Web applications (AngularJS, JavaScript, jQuery, HTML, CSS)
 - MongoDB (no-SQL) with sharding and replication, MySQL (SQL) and Oracle database APIs
 - Git, Gitlab, SVN source code control
 - Icon, artwork creation using GIMP, InkScape
 - Agile Scrum, Kanban, use of Trello for task management
- Computer Systems
 - Extensive knowledge and use of Linux (since pre-1.0 kernel in 1993)
 - Heavy Mac OS X use
 - AWS deployment (EC2, S3, ELB, et cetera)
 - Wrote a basic UNIX kernel and filesystem with caching from scratch
 - Networking, web server administration, firewall setup, mail configuration, and other sys admin functions

PATENTS

 Method and Apparatus for Prioritizing and Routing Emergent Activity Reporting, US Patent 8874071, October 28, 2014

CLEARANCE

• Top Secret, Secret clearance held since 1996

OTHER INTERESTS

• Linux hacking, computer security, video games, homebrewing, cars, filmmaking, and collecting vintage Star Wars items