

BENJAMIN STEWART

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OBJECTIVE: Utilize web technologies to build end-to-end applications based on a service-oriented architecture.

EDUCATION:

10/01 - 03/04 M.S. in Computer Science University of Washington
08/97 - 05/01 B.S. in Computer Science, *Summa cum Laude* University of Maryland, College Park

SKILLS:

Languages: Java/JavaScript, HTML/CSS, C/C++/C#, Perl, Python, Powershell
Frameworks: JAXRS, AngularJS, DropWizard, Lombok, Jackson, Quartz Scheduler, MongoJack, WIN32/WinRT/COM, SAX/DOM/XSLT, Hibernate, JUnit
Databases: MariaDB, MongoDB, MySQL
Software: ElasticSearch, kubernetes, Docker, NGINX, RabbitMQ, AWS, GitLab CI/CD, Grafana, Kibana, Splunk
Operating Systems: LINUX/UNIX, Windows, Android,

EMPLOYMENT:

12/16 - Present zulily Software Engineering Manager

Software Engineering Manager of software engineers building solutions for Vendor Operations, Vendor Portal and Editorial Studio Operations teams. Interface with Product Management Tech team and Project Coordinators within business teams to define requirements, prioritize projects and track/communicate project status. Design the architecture and drive the operations decisions for the software developed by the team.

05/16 - 12/16 zulily Lead Software Engineer

Lead software engineer for Editorial Studio Operations team. Built workflow tools and management software to allow Merchant and Studio Operations team coordinate requests for zulily home page photography which highlights vendor products for sale on the site.

Created and deployed Java backend services as well as JavaScript/Angular UI apps deployed via Kubernetes to Google Container Engine. Leveraged Google Storage for storing images produced by Studio Operations team. Designed data schemas for tracking image request, image, task and workflow metadata in Mongo.

02/15 - 04/16 zulily Senior Software Engineer

Developer on Vendor Operations team. Built MySQL databases and Java web services for: automating ingestion of EDI invoices, purchase order scheduling and automation as well as delivery of purchases orders via EDI/e-mail. Created JavaScript/Angular UI for viewing and managing vendor task workflows to improve Vendor Operation Specialist efficiency managing Vendor relations.

11/05 – 01/15

Microsoft

Senior Software Engineer

For Windows 10, worked on porting location aware scenarios for Cortana from Windows Phone to Windows using the WinRT framework. For Windows 8.1, integrated Bing Smart Search into Windows Shell. Technical lead for cross-team engagement with Bing to design client/server protocol for sending queries and passing results to XAML rendering layer. Implemented client portions of the protocol. For Windows 8, worked on Live Tiles API. Wrote client connectivity layers which maintain persistent TCP connection to Windows Notification Service (WNS) for receiving push notifications. Collaborated with Kernel & WNS teams to design policies for optimizing network usage on Mobile Broadband networks and increasing battery life. For Windows 7, wrote C++ APIs to Search diagnostics built into Windows/hosted by Microsoft services. For Vista, used C# to build/publish diagnostics for automated problem detection during support calls.

03/04 – 11/05

Marchex, Inc.

Software Engineer/Technical Lead

Led team of developers in design/implementation of technologies related to Direct Navigation business. This included data modeling and RESTful web services for domain management, data warehousing of web/click traffic and dynamic content generation for 200,000+ domains. Worked with Enhance Interactive business to port Advertiser AMS from .NET to MVC design using Jakarta Struts/Velocity. Integrated Auto-CPC functionality into proprietary PPC Engine.

07/02 – 01/04

Computer Science and Engineering, University of Washington

Research Assistant

Conducted research for Centibots project. Project encompassed 100 robots autonomously exploring/mapping large indoor environments while performing surveillance/people tracking. Developed multi-threaded multi-robot system in C++. Built the structure of indoor environments using Bayesian statistical methods/machine learning. Adapted particle filters for localization and map merging.

PUBLICATIONS:

- *Extracting places from traces of locations* J.H. Kang, W. Welbourne, B. Stewart, G. Borriello. WMASH-2004
- *The Revisiting Problem in Robot Map Building: A Hierarchical Bayesian Approach* B. Stewart, J. Ko, D. Fox and K. Konolige. UAI-2003
- *A Practical, Decision-theoretic Approach to Multi-Robot Mapping and Exploration* J Ko, B. Stewart, D. Fox, K. Konolige and B. Limketkai. IROS-2003
- *Map Merging for Distributed Robot Navigation* K. Konolige, D. Fox, J. Ko, B. Limketkai and B. Stewart. IROS-2003
- *A Hierarchical Bayesian Approach to the Revisiting Problem in Mobile Robot Map Building* D. Fox, J. Ko, K. Konolige and B. Stewart. ISRR-2003
- *Distributed multi-robot mapping* D. Fox, J. Ko, B. Stewart, K. Konolige, and B. Limketkai. *Multi-Robot Systems: From Swarms to Intelligent Automata*, volume II. Kluwer, 2003.
- *CentiBOTS: Large-scale robot teams* K. Konolige, C. Ortiz, R. Vincent, A. Agno, M. Eriksen, B. Limketkai, M. Lewis, L. Briesemeister, E. Ruspini, D. Fox, J. Ko, B. Stewart, and L. Guibas. *Multi-Robot Systems: From Swarms to Intelligent Automata*, volume II. Kluwer, 2003

PROJECTS:

A portfolio of academic, research and personal projects can be found online at:

<http://onenationunderagroove.net/portfolio/>

ASSOCIATIONS: DJ/Record Librarian at 88.1 FM WMUC, College Park, 1997-2001