

BENJAMIN STEWART

747 N. 74th St.
Seattle, WA 98103

e-mail: ben.d.stewart@gmail.com
phone: (206) 310-2766

OBJECTIVE: Develop software for computer graphics, multimedia or content management applications.

EDUCATION:

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

SKILLS:

Programming Languages: Java (SE/EE), C/C++, SQL, Perl, HTML, JavaScript, C#, CSS, Powershell
APIs: WIN32 & COM, Java Servlets, Jakarta Struts, Velocity, SAX, DOM, JDBC, XSLT, JUnit, SOAP, WCF, OpenGL, Berkley/WINSOCK programming
Databases: Oracle 10g, mySQL, Cloudscape, SQL Server
Software: Ant, Jakarta Tomcat, Apache HTTP Server, IIS, Flash
Operating Systems: LINUX/UNIX, Windows

PROJECTS:

A portfolio of academic, research and personal projects can be found online at:
<http://onenationunderagroove.net/portfolio/>

EMPLOYMENT:

11/05 – Present	Microsoft Software Development Engineer 2 Developer on the Windows User Experience team. Previously worked in Windows Fundamentals group. For Windows 7, wrote internal C++ APIs for searching metadata related to diagnostics hosted by online Microsoft services as well as those built into Windows. For Vista, used C# to build and publish diagnostics leveraged by Microsoft Support to automate problem detection during support calls.	Supervisor: Gaurav Anand
03/04 – 11/05	Marchex, Inc. Software Engineer/Technical Lead Led team of developers in design and implementation of technologies related to Direct Navigation business. This included data modeling and 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 a MVC design using Jakarta Struts + Velocity. Integrated Auto-CPC functionality into proprietary PPC Engine.	Supervisor: Yang Lim
07/02 – 01/04	Computer Science and Engineering, University of Washington Research Assistant Conducted research for Centibots project. Project aim was for 100 robots to autonomously explore and map large indoor environments while performing surveillance and people tracking. Developed multi-threaded multi-robot system in C++. Built the structure of indoor environments using Bayesian statistical methods and machine learning. Adapted particle filters for localization and map merging.	Supervisor: Dieter Fox

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

ASSOCIATIONS:

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