

Jacob L. Mandelson

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Computer Experience:

- * Programming in a variety of languages, primarily C; also C++, Python, Java.
- * Compiler and toolchain development.
- * Real-time operating system (RTOS) kernel development.
- * Asynchronous hardware mixed-mode simulation.
- * Natural language processing and internationalization.

US Patent 7680648 - Text segmentation rescoring using web corpus frequencies

Bachelor's Degree in Engineering and Applied Science (Computer Science)
from the California Institute of Technology, June 1998.
(Pasadena, CA 91125)

Employment:

- 2004-2010: Software engineer
AdSense for Domains: Improved the generation of precomputed transforms and the handling of misspelled words in domain name segmentation. Added support for multiple languages. Migrated technology from an acquisition to Google's codebase.
Related Link Units: Improvements to the link clustering and the management of offensive terms filters, increasing automation and reducing latency.
Content Ads Infrastructure: Designed and built an internal diagnostic tool for exposing the AdSense decision pipeline to support personnel.
Active in establishing an engineer mentoring program for new hires to the Santa Monica office.
Google / Santa Monica, CA
- 2002-2003: Software engineer, internationalization (i18n)
Conversion of web search/advertiser listings system to the Japanese marketplace.
Overture Services and Yahoo / Pasadena, CA
- 2000-2002: Software engineer
Compiler, toolchain, co-simulation development for an asynchronous processor target.
Fulcrum Microsystems / Calabasas, CA
- 1998-2000: Software engineer, real-time operating system (RTOS) development
Device drivers and instrumentation of kernel and userland on PowerPC-based embedded systems.
Green Hills Software / Santa Barbara, CA
- 1997: Intern programmer
Financial software development with relational database access.
First Quadrant Corp. / Pasadena, CA
- 1995-1996: Undergraduate research assistant, Infospheres Research Group
Research in distributed systems, cross-platform Unix daemon development.
Caltech / Pasadena, CA
- 1993-1995: Intern programmer ('93-94)
Programmer/system administrator/Oracle database admin ('94-95)
Development of a communication protocol simulator using the OpNet simulator framework.
Administration of a small network of Solaris database servers and Windows workstations.
MITRE Corp. / McLean, VA