

Nathan Bales

8018 Regents Road #102. San Diego, CA 92122
nbales@ucsd.edu | (206) 200-7735

Education

University of California, San Diego

PhD in Computer Science – Expected Completion: 2011 – GPA 3.7
California Research Fellowship 2006-07

University of Washington

Bachelor of Science in Computer Engineering – 2006 – GPA 3.7
UW Undergraduate Scholar Award 2002-03, 2003-04

Research Experience

AT&T Labs Research

Summer 2006

Research Intern – Database Group. Explored the use of the XML data model and XQuery as a tool for writing ad-hoc analysis of parse trees to allow database administrators to make informed schema decisions based on the workload recorded in query logs.

Microsoft Corporation

Summer 2006

Research Intern – Microsoft Live Labs – Document Processing and Understanding. Implemented a prototype and testing framework for a TabletPC related technology. Experimented with various optimizations for said technology and reported findings.

University of Washington CSE

2004 - 2005

Data Management Group - XBrain Project. Presented RXQuery and related work at XSym 2005, a workshop of VLDB. RXQuery is a language for mapping relational schemas to XML.

University of Washington Information School

Summer 2004

Research Assistant - u b i t SmartSites Research Project. Implemented prototype PHP application for lowering barriers of entry in classroom website development. Assisted in development and implementation of research rubrics and protocols.

Teaching Experience

University of California, San Diego CSE

Winter 2007

TA - Introduction to Database Systems. Ran discussion session and held office hours for undergraduate students learning functional, objective, and logical programming languages.

University of Washington CSE

2005 - 2006

TA - Introduction to Database Systems. Developing and supporting a project using ASP.NET and SQL Server 2005 to teach relational and XML management techniques.

University of Washington CSE

Winter 2005

Lab Consultant – Introductory Programming Lab. Assisted students learning Java in the introductory programming and non-major Data Structures courses.

Activities / Industry Experience

Microsoft Corporation

Spring 2005

2006 Imagine Cup Software Engineering Competition. ‘Employees Choice’ award for MiKi: a TabletPC application that uses annotations and flags on maps for communication between mobile relief workers.

Microsoft Corporation

Summer 2005

Program Manager Intern - Office Shared Services, Longhorn and Platform Team. Owned a feature spec and drove it from inception through critique and closure.

Microsoft Corporation

Spring 2005

2005 Imagine Cup - Software Engineering Competition. Received a 2nd place in region for Pigment, an application for collaborative TabletPC Ink annotation on documents of different types.

Publications

Nathan Bales, Jim Brinkley, Sally Lee, Shobit Mathu, Chris Re, and Dan Suci. "A Framework for XML-Based Integration of Data, Visualization and Analysis in a Biomedical Domain." Database and XML Technologies, the Proceedings of XSym 2005

Relevant Coursework

Graduate:

Database Systems (UW) • Database Systems (UCSD) • Implementation of Database Systems
Logic in Computer Science • Computer Architecture • Parallel Architectures • Operating Systems
Complexity Theory • Software Engineering • Algorithms

Undergraduate:

Database Systems • Software Engineering • Compiler Design • Data Structures • Programming Languages
Operating Systems • Computer Programming • Machine Organization • Computer Networks
Computer Theory • Concepts and Tools for Software Development • Discrete Mathematics
Artificial Intelligence • Digital Design • Algorithms • Software Engineering Capstone