# Abhishek Pradhan

320 E Pine St, APT 514, Seattle, WA 98122 • (952) 261-4081 • abhishekpradhan@alumni.illinois.edu

#### **EXPERIENCE**

## **Microsoft Corporation**

Bellevue, Washington August 2011 – Present

Software Development Engineer II, Bing – Core Search Platform

### **Core Search Technologies**

- Responsible for the development of various components that are part of the search ranking infrastructure
- Shipped a major infrastructure overhaul of the search backend ranking platform
- Implemented performance improvements targeted towards reducing latency and improving query serving capacity
- Extended backend functionality to support entity search capabilities
- Implemented a new operator in the Bing query language

## **Programming Languages and Compilers**

- Designed and developed a domain specific language for relevance developers
- Implemented search ranking algorithms in this language to evangelize usage amongst the relevance teams on Bing
- Proposed and implemented language artifacts and extensions in order to support greater functionality and ease of use

# **Release Management and Operations**

- Managed various monthly and weekly releases of the backend platform
- Developed monitoring components designed to be part of the release workflow
- Managed external team integration into automated release and deployment workflows
- Responsible for release qualifications related to relevance in the ranking infrastructure team

## Software Development Engineer Intern, Bing - Core Search Platform

June 2010 – August 2010

- Developed a domain specific functional programming language targeted towards relevance developers
- Extended the core language library to interface with algorithms used to generate captions on the search result page

### **Database and Information Systems Laboratory**

Urbana, Illinois

Undergraduate Research

December 2008 – May 2010

- Developed methods to improve focused crawling techniques concerning specialized datasets for vertical search engines
- Implemented algorithms to scrape relevant information from the internet while minimizing bandwidth usage

# **Department of Computer Science**

Urbana, Illinois

Undergraduate Teaching Assistant - Introduction to Computer Science

January 2008 – December 2009

- Taught introductory material relating to topics such as object oriented programming and recursion
- Led a discussion section that supplemented coursework covered during lectures

## **Programming Languages**

Commonly Used: Java, C++

Previously Used: C, C#, Python, OCaml, MIPS, Scheme, SQL

# **NOTABLE PROJECTS**

# **Illinois Phone** – Team Lead

- Led a team of 3 students to build a Windows Phone application designed to enable time sharing of computing resources
- Developed a cloud component hosted on Google App Engine and a desktop component that interacted with Active Directory Services on Windows
- Granted awards sponsored by Microsoft Research and the Siebel Center Computing Habitat Competition

#### **EDUCATION**

### University of Illinois at Urbana – Champaign

May 2011 GPA: 3.59/4.0

Bachelor of Science in Computer Science - Graduated with Honors

## **AWARDS and HONORS**

- Microsoft Research Project Hawaii Most Innovative Application (2011)
- Siebel Center Computing Habitat Competition Judge's Prize (2009), Second Place (2010), Best Presentation (2010), Grand Prize (2011), Best Use of Mobile Devices (2011)
- Yahoo Hack Day Second Place (2009)
- Dean's List