

**Mark W. Wilson**

710 S.E. 34<sup>th</sup> Avenue, Portland, OR 97214  
H: 503.233.8867 C: 503.970.4625 E: mwilson@rdrop.com

### SUMMARY OF QUALIFICATIONS

- Eleven years of experience developing electronic design automation (EDA) physical design tools, methodology, and training, for three flagship architecture microprocessor designs.
- Strong technical analysis, problem solving skills, and experience managing complex, multi-site tasks.

### EDUCATION

**J.D., anticipated December 2008**

**LEWIS & CLARK LAW SCHOOL**

**GPA: 3.40/4.0 Class rank: 50/264**

**PORTLAND, OR**

**ELECTRONIC RESOURCES EDITOR & MEMBER:** Environmental Law Review

**B.S., Electrical and Computer Engineering, May 1995**

**CARNEGIE MELLON UNIVERSITY**

**PITTSBURGH, PA**

*Channel Routing using Boolean Satisfiability*, independent senior project.

**Graduate Coursework:** *Finite Element Analysis I*, Columbia University, 1998.

*Algorithms for Design Automation II*, Portland State University, 1997.

### EXPERIENCE

#### **Intel Corp.**

##### **Desktop Products Group**

**July 1995—Present**

*Senior Staff Design Automation Engineer*

**December 2003—Present**

- Automated standard cell library build flows, validation, data mining, and performed library design work for future 45 nm flagship microprocessor.
- Developed a revolutionary design tool allowing on-the-fly standard cell creation. This reduced standard cell concept-to-usage turnaround time from one-two months, to half a day.
- Invention disclosure reviewer for Intel Legal Software IP committee.

*Physical Design Automation Team Lead*

**January 2000—December 2003**

- Managed a team of six CAD engineers. Developed physical design tools and methodology for mixed cell-based/full-custom design style, 90 nm technology lead vehicle Pentium 4<sup>®</sup> microprocessor.
- Developed 90nm process standard cell library layout architecture specifications. Coordinated process design rule impact estimation between design & manufacturing process development groups.

*Staff Design Automation Engineer*

**July 1995—January 2000**

- Specified and implemented new design automation tools, scripts, and methodologies for Pentium II<sup>®</sup> and Pentium 4<sup>®</sup> processors. Applications support for Intel's custom layout editor and leaf cell layout synthesis tool, supporting over one hundred mask designers.
- Specified and directed development of Intel's first DFM, dummy metal fill and decoupling capacitor insertion tool. Built an automatic repeater station layout tool using IC Craftsman routing tool.

**CARNEGIE MELLON RESEARCH INSTITUTE**

**January 1992—May 1995**

Paid student internship. Designed, built, and tested industrial control and solid state gas sensor prototypes.

### AWARDS, ACTIVITIES, AND INTERESTS

INTEL DIVISION AWARD: Outstanding execution: Prescott A0 layout verification and tapeout/assembly.

INTEL DIVISION AWARD: Contributions in analysis, design, and implementation of fixes for Pentium 4<sup>®</sup> bin8 issue, resulting in 20 percent yield increase.

INTEL DIVISION AWARD: Development of incremental standard cell library methodology.

ALUMNUS REPRESENTATIVE: Carnegie Mellon Admissions Council, 1996-1999.

Avid road bicyclist, alpine skier, homebrewer, and BJCP National level beer judge.

### PUBLICATIONS

*Novel Features & Methodology to Increase Physical Design for Debug Coverage by 10X*, DTTC (\*), 2003.

*Rapid Interconnect Design Through the Use of Virtual Repeaters*, DTTC, 2000.

*Willamette Stretchable Cell Layout Methodology*, DTTC, 1997.

(\* ) Design & Test Technology Conference, Intel's EDA conference. Co-author on all papers listed.