

Curriculum Vitae

Matthew L. Basinger

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Education and Research Experience

Master of Science in Earth and Environmental Engineering, Columbia University (In Progress)

- Estimated completion – December 2006
- Thesis topic: Energy Resource Evaluation and Planning for Small Island Developing States

Bachelor of Science in Engineering and Applied Sciences, Seattle Pacific University, June, 2003

- GPA 3.75/4.0 *magna cum laude*
- Minor in Global and Urban Ministries
- Minor in Music

GRE General Test: 590 Verbal, 680 Quantitative, 5.5 Analytical Writing

Small Steps – Sustainable Development One Light Bulb at a Time

The Other Journal (electronic journal) – feature article, January-February 2006

- Non technical explanation of Sao Tome rural electrification case study

PSoC CapSense: Capacitive Touch Sensing Made Easy

Electronic Product Design (top UK embedded design magazine) – cover article, October 2005

- Technical article promoting CY8C21x34 microcontroller for capacitive touch sensing applications

Electricity Access Pilot Project Proposal for São Tomé e Príncipe

Columbia University Earth Institute sponsored energy advisory project, published to web July 2005

- Proposal used to raise more than \$40,000 for project support
(http://www.earthinstitute.columbia.edu/cgsd/STP/index_actionplan.htm)

Toward a Peace and Justice Studies Program at SPU

University Scholars Research Project, August 2002-June 2003

- 100 page dissertation proposing a Peace and Justice Studies program at Seattle Pacific University

Water Treatment for Small Systems: Slow Sand Filtration and Ozone Sterilization

Engineering Senior Design Project, March-June 2003

- Independent study, design project

Professional Experience

Product Marketing Engineer, Cypress Microsystems, *August 2003 – August 2005*

- Manage United States West Coast Market
- Development Tools Marketing Lead

Audio Engineering Internship, HCJB World Radio Ecuador, *Summer 2002*

- Created, tested, and revised bar-code scanner application and interface programs
- Conceptually designed & collaborated on a multi-departmental inventory database
- Visited five successful water project locations throughout Ecuador

Teaching and Training Experience

Teaching Assistant for Environmental Engineering; Fall 2006

- Grading assignments, assisting student with homework, proctoring exams, and administrative duties

Teaching Assistant for A Better Planet by Design; Spring 2006

- Grading assignments, assisting student with term projects, and administrative duties

Teaching Assistant for Planning and Management of Urban Hydrologic Systems; Fall 2005

- Assist professor with grading assignments, computer lab, and administrative duties

PSoC Express Tele-training (Programmable System on Chip); July, 2005

- Developed, created and recorded three session training program and labs
 - Introduction to PSoC Express
 - Designing with the CY3210-ExpresDK Development Kit
 - IO Management and Timing Control Techniques

PSoC Express Field Application Engineer and Sales Force Training; March 2005

- Developed and created training structure and material for a two hour hands on training
- Presented in five sessions to ~150 attendees at satellite locations world wide

Programmable System on Chip (PSoC) Hands-on Seminar; November 2004 – January 2005

- Developed and created seminar structure and material
- Presented at Phoenix, Seattle, Vancouver B.C., and Salt Lake City locations to <100 attendees

Cypress Semiconductor Field Application Engineer (FAE) Training; July and October 2004

- Co-developed and created quarterly PSoC Training
- Presented quarterly training to 50 FAEs from the US, Canada, China, Japan, Taiwan, Europe, India

PSoC Tele-training; February, 2004

- Developed, created and recorded five session training program and labs
 - Introduction to PSoC
 - Designing with PSoC: Datasheets and Routing Resources
 - Debugging with PSoC
 - Dynamic Reconfiguration
 - Advanced Analog Design
- Over 500 engineers worldwide have completed the training

Cypress Semiconductor Sales Force Training; January 2004

- Developed, created and recorded three session training program
 - A Sales Overview to PSoC
 - PSoC Sales Strategy
 - PSoC Development Tools Tutorial

PSoC with Cypress Enhanced Analog (CEA) Distribution Partner Training; December, 2003

- Developed, created and recorded two session training program
 - PSoC with CEA for Distributors
 - PSoC Development Tools for Distributors

PSoC with Cypress Enhanced Analog (CEA) Seminars; October, 2003

- Developed and created material for international engineering seminar
- Presented at Minneapolis, Boston, and Philadelphia seminars

Lecture on Indigenous Religious Music of Ecuador, Seattle Pacific University; May, 2003

- Invited by professor to teach *Song of the Church* class session to undergraduates

Academic/Research Interests

The Technology, Politics, and Ethics of Sustainable Development Engineering

- Energy Development & Management in Developing Countries
- Water Resource Development & Management for Developing Countries

Volunteer Experience

Earth Institute Student Advisory Council – member of 20 student board, 2005-2006

High School Math Tutor – provide weekly math tutoring, January-June 2006

MuKappa Assistant – coordinating weekly college student cadre, 2003-2005

Music Team Member – First Free Methodist Church worship team, 2003-2005

Men's Ministry Theme House – led men in weekly discipleship group, 2002-2003

Chapel Coordinator – led team of 12 student-workers and volunteers, 2001-2002

Residence Hall Council President – led meetings and organized events, 2000-2001

Invitational Speeches and Honors

Thinking Teleologically – One of three invited Speakers at SPU Honors Convocation, 2003

Tips for Completing the U-scholars Senior Project – One of three invited Speakers to present Senior Project and provide insights to underclassmen at SPU University Scholars Celebration, 2003

University Scholars Program – honors program with enrolment by invite, 1999-2003

Who's Who Among Students In American Universities and Colleges, 2003

Barnabas Servant Leadership Award – annual award to four SPU juniors, 2002

Scholarships and Grants

Columbia University Earth and Environmental Engineering Teaching Assistantship, Fall 2006, \$10,000 + tuition

Columbia University Earth and Environmental Engineering Departmental Stipend, 2005-2006, \$18,000

President's Scholarship, SPU, 1999-2003, \$23,833.

SPU Grant, SPU, 2002-2003, \$3,632

Servant Leadership Scholarship, SPU, 2002-2003, \$1,000

Swanstrom Centurion Scholarship, SPU, 2002-2003, \$1,150

Church Youth Ministry Scholarship, First Baptist of Eastgate, 2001-2002, \$1,000

Local (Boise) Scholarship for International Order of Foresters, IOF, 2000-2001, \$750

Deffenbaugh EE Scholarship, SPU, 1999-2001, \$1,000

Valedictorian Scholarship, SPU, 1999-2001, \$1,500

Principals Leadership Award, NASSP, 1999-2000, \$1,000

National Honor Society Scholarship, NASSP, 1999-2000, \$1,000

National Scholarship for International Order of Foresters, IOF, 1999-2000, \$1,000

Scholarship for Academic Excellence, Idaho Power, 1999-2000, \$1,000

Warren Reynolds Scholarship, Kuna High School, 1999-200, \$250

Pepsi Scholarship, Pepsi, 1999-2000, \$500

References

Vijay Modi, Professor of Mechanical Engineering at Columbia University

- Relationship: professor and thesis co-advisor
- Phone: 212-854-2956
- Email: modi@columbia.edu

Fred Jaccard, Business Development Marketing Manager, Cypress Semiconductor

- Relationship: manager
- Phone: 206-612-3855
- Email: f.jaccard@verizon.net

John Lindberg, Associate Professor of Physics at Seattle Pacific University

- Relationship: professor and academic advisor
- Phone: 206-281-2866
- Email: lindberg@spu.edu

Susan Gallagher, Professor, Director of the Center for Scholarship and Faculty Development and the University Scholars Program at Seattle Pacific University

- Relationship: professor and University Scholars Project Reader
- Phone: 206-281-2152
- Email: gallaghe@spu.edu