Rachel Beddor

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OBJECTIVE

Seeking embedded design position to engage my technical and creative skills to design innovative, user-friendly hardware-software products.

EDUCATION

Georgia Institute of Technology May 2018
Bachelor of Science in Computer Engineering

- Certificate in Chinese Language
- Capstone Project: Drone Based Aircraft Inspection, sponsored by Honeywell

PROFESSIONAL EXPERIENCE

Microchip Technology Chandler, AZ
8-bit PIC & AVR MCU Outbound Mass Market
Product Marketing Engineer June 2018 - Present

- Redefining user experience for professional embedded design development tools, products and solutions
- Concentrating on key IoT hardware design elements: microcontroller, secure element, and network controller
- Writing outbound marketing material for web, promotions, and social media to improve digital engagement
- Started an influencer marketing program to nurture long-lasting relationships with the mass market
- Published article on IoT connectivity for embedded devices in *All About Circuits* publication

Keysight Technologies Colorado Springs, CO
Formerly Agilent Technologies; Oscilloscopes and Protocol Division
Product Marketing Engineer Intern Summers 2016, 2017

- Launched ARINC 429, MIL-STD-1553, I2S, Manchester and SpaceWire bus protocol decode software for oscilloscopes
- Interfaced with customers and R&D in U.S., Europe, India and Malaysia to develop quality products
- Wrote datasheets, filmed informational videos, published blogs and designed product pages now used on keysight.com
- Directed meetings with key customers in the Aerospace/Defense industry to forge partnerships
- Edited datasheets and consulted on writing style for product engineers

KEY PROJECTS

Secure Cloud-Controlled Home Electronics

- ATmega4808 8-bit MCU, WINC1510 W-Fi Controller, ATECC608a Secure Element, Google Cloud Platform
- Demonstrated at Microchip's booth for Google Cloud Next 2019
- Tutorial was chosen as a featured project on Hackster.io (see tutorial at Hackster.io/rachel-beddor)

Effortless AVR Design: Introduction to AVR Toolchain

- Class instructor on AVR toolchain and development ecosystem for Microchip customers
- Topics covered include: Atmel Studio, START graphical programming tool, BLE through UART interface
- Two-part lab available at Hackster.io/rachel-beddor

RELEVANT COURSEWORK

- **Digital Design Laboratory:** FPGA programming using VHDL
- **Computer Microarchitecture:** Architecture, concurrency, and energy in computation
- **VLSI and Advanced Digital Design:** Integrated circuit design with implementation through Cadence software
- **Advanced VLSI Systems:** Complex VLSI systems with emphasis on how they are incorporated into a silicon environment
- **Embedded System Design**: hardware/software design for embedded X86/ARM systems
- **IC Fabrication**: Laboratory for fabrication/testing of basic CMOS circuits
  Full coursework and descriptions available by request

HANDS-ON EXPERIENCE

Software: C, C++, MATLAB, HTML, Linux/Unix, MPLAB, Atmel Studio
Hardware: PIC, AVR, MIPS, VLSI, Secure Elements and HSMs, 8-bit MCU, 16-bit MCU, Wi-Fi Modules (WINC1500), Bluetooth Modules (RN4020, RN4870/71, RN4678), MikroElektronika Click Boards, ARM Cortex-M mBed platform, PICkit debuggers
Protocol: UART, USB, I2C, SPI, Wi-Fi, BLE, SpaceWire, SpaceFibre, I2S, Ethernet, ARINC429, MIL-STD-1553, CAN/LIN
Marketing: Campaign Creation, Product Launch, Customer Interaction, Mass-Market, Promotions, User/ Customer Experience