VANIKA HANS

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EDUCATION

Bachelor of Science in Electrical and Computer Engineering, Minor in Computer Science, Leadership Certificate   *May 2018*
University of Colorado at Boulder

Relevant Coursework: Digital Logic, Computer Organization, Embedded Systems, Programming Digital Systems, Circuits I & II, Electronics Design Lab, Linear Systems, Microelectronics, Operating Systems, Control Systems, Algorithms, Data Structures, Digital Signal Processing, Design of Implantable Devices

Awards/Scholarships: CU Esteemed Scholar (James H. Baker Scholarship), Dean's List Fall 2016, BOLD (Broadening Opportunities through Learning and Diversity) Scholar, Engineering Honors Program, Engineering Leadership Program

TECHNICAL SKILLS

Programming: C/Embedded C, C++, Assembly, Verilog, SystemVerilog, Codasip, UNIX, VIM, MATLAB, UPF, HTML/CSS
Software/IDEs: CodeComposer Studio, Codasip, LPCXpresso, LT SPICE, DVE, Verdi, Simulink
Hardware: TI MSP432P401R, EDUMKII Educational Booster Pack, Altera DE0 Board, LPC1115
General: MIPS Architecture, FPGA/Microcontroller Experience, Soldering, Lab Tools, Teamwork, Communication, Leadership

EXPERIENCE

Work Experience:

IP Validation Engineer at Intel Corporation (RA2, Hillsboro, OR)   *July 2018 – Present*
 - Developed monitors for registers and RTL signals, sequences for different registers and functionalities, and a checker to validate feature events utilizing SystemVerilog, OVM, and Saola.

Logic and Validation Intern at Intel Corporation (Fort Collins Design Center, Fort Collins, CO)   *May – August 2017*
 - Validated Isolation Strategies in DVE/Verdi for MPP Isolation Coverage, debugged RTL functionality with X-Propagation enabled

Knowledge Foundry Tutor at CU Department of Electrical, Computer & Energy Engineering   *January – May 2017*
 - Tutored students taking Circuits 1, Linear Systems, Microelectronics, Digital Logic, and Embedded Systems.

IT Intern at Hunter Douglas (Broomfield, CO)   *May – December 2016*
 - Researched, documented, and presented programmatic solutions for data synchronization between dealer and employee databases

Junior Developer at DragonDev (Boulder, CO)   *March – May 2016*
 - Helped research, design, and develop business applications; maintained company website using HTML

Projects:

Senior Capstone Project: "Smart Blind Cane for the Visually Impaired"   *August 2017 – May 2018*
 - Created and designed smart blind cane. Device features ultrasonic sensors and vibration motors for obstacle avoidance, a speaker for communication, and an application linked with the cane to send an emergency text on a button push.

Application Specific Instruction Set Processors (ASIPS) Independent Study   *August 2017 – December 2017*
 - Optimized a RISC-V CPU core's Instruction Set Architecture, Cycle Accurate Model, and cache organization for real time embedded radio-spectrometry processing utilizing Codasip.

Embedded Systems Project: Interactive Gaming Platform on Microcontroller   *October – December 2016*
 - Created game on MSP432P401R and EDUMKII Booster Pack using UART, button, timer, and joystick interrupts, and LCD Display

Verilog Digital Logic Project: 7-Segment Display on DE0 Board   *March – April 2016*
 - Designed Ternary Adder on 7-segment display. Featured add/subtract mode, and a carry-lookahead/ripple-carry adder

LEADERSHIP

VP, Director of Outreach, and Society Representative of Society of Women Engineers (SWE)   *August 2014 – May 2018*
 - Organized networking nights, set up engineering presentations, panels, events, and meetings to encourage students K-12 to STEM, and represented CU SWE at both the collegiate and national level; attended conferences in Nashville, Philadelphia, Austin, Oklahoma City, and Boulder.

Treasurer of Electrical Engineering Student Society (EESS), Organized Lab Tools Workshop   *July 2016 – May 2018*
 - Organized social events, and taught students to use oscilloscopes, multimeters, waveform generators, and power supplies

REFERENCES

Chris Smithhisler: chris.smithhisler@intel.com; 970-207-7091
Intel Corporation, Engineering Manager

George Allaman: George.allaman@hunterdouglas.com; 303-876-3177
Hunter Douglas, Mentor

Alex Fosdick: alexander.fosdick@colorado.edu; 303-492-7327
University of Colorado Boulder, Instructor / Mentor

Additional References Available Upon Request