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 **GPA: 3.227**

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***
- Pre-Silicon Validation: Developed monitors for registers and RTL signals, sequences as part of PMON (Performance Monitoring) feature validation (Initial Path Clearing), and PMON checker for 209 events (Enhanced Path Clearing) for IALCM DP utilizing SystemVerilog, OVM, and Saola. Worked with IALCM Performance Validation team to set up latency and bandwidth testing

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