**MARK HOANG**

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**EDUCATION**

California Polytechnic State University, San Luis Obispo

**Bachelor of Science in Electrical Engineering** December 20xx

GPA: 3.6

**RELEVANT COURSEWORK**

Electronic Devices, Linear Control Systems, Random Signals and Noise, Digital Integrated Electronics, Electronic Circuits, Integrated Electronic Circuits, Signal Transmission, Discrete Time Systems, Electromagnetic Fields I & II, Digital System Design, High-Frequency Amplifier Design, Digital Communication Systems, Digital Signal Processing, Polymer Electronics, and Electronic Manufacturing

**SKILLS**

**Software**: Electronic Workbench, PSPICE (OrCAD), Xilinx, Micro-Cap, Matlab, DADISP, ADS, C

**Hardware**: HP 8410B Network Analyzer, Anritsu MS 4622B, Spectrum Analyzer

**TECHNICAL PROJECTS**

**Senior Project** 1/xx – 6/xx

• Built a transmitter and receiver for an audio signal

• Utilized direct sequence spread spectrum system and modulated data signal using BPSK (Binary Phase Shift Keying)

• Demodulated signal using 2 parallel integrators to get more reliable data at the receiver

**Narrowband Amplifier Project** 1/xx – 3/xx

• Using Agilent’s ADS software, designed narrowband amplifier by meeting specified requirements: frequency range of 1200-1500MHz, source and load impedance of 50 Ohms, input and output VSWR less than 2.0 and less than 1dB ripple

**Digilock Project** 9/xx – 12/xx

• Designed an FSM using VHDL and StateCAD software

• Implemented functions by programming and testing a PAL using VHDL, NOVA, StateCAD, and hardware tests

**Waveform Generator Project** 9/xx – 12/xx

• Designed a 4-function generator by programming PLD (CE22V10H), connected to DAV0830LCN (8-Bit DAC)

**Seat Belt Interlock Project** 9/xx – 12/xx

• Designed a synchronous FSM and downloaded the design into FPGA on Digilab DIOI Board and tested the design using switches and LEDs

**WORK EXPERIENCE**

**Electrical Engineering Laboratory Assistant** 1/xx – 5/xx

California Polytechnic State University – San Luis Obispo

• Helped students conduct electrical engineering experiments and graded homework assignments

**Mathematics Computer Laboratory Assistant** 1/xx – 8/xx

Santa Rosa Junior College, Santa Rosa, CA

• Installed and updated operating system and software programs

• Helped students learn software programs such as: Maple, Differential System, Data Desk, Microsoft Office, Omni Page, Vista Scan, Adobe Photoshop, and Adobe Illustrator

**LEADERSHIP & INVOLVEMENT**

Treasurer, IEEE Cal Poly Student Branch 20xx – 20xx

Member, Power Engineering Society 20xx – 20xx