Nathan Muramatsu

94-639 Kauakapuu Loop Mililani, HI, 96789, Cell Phone (808)-351-6887, E-mail nkm22@nau.edu

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| Objective | A challenging job, utilizing Electrical Engineering skills. |
| Education | **College of Engineering, Forestry & Natural Sciences Flagstaff, AZ****Northern Arizona University**Degree Expected: Bachelor of Science in Engineering **Electrical Engineering**Expected to graduate **May 2011**.Cumulative GPA 3.43/4.0**Mid- Pacific Institute**  High School Diploma **Honolulu, HI** Graduated: May 2007  |
| Academic projects | **Engineering design:** * Working with multidisciplinary teams to build, program and test Lego based robots.
* The robot and program utilized infrared communications, sensors, and motors.
* Example challenges include line-following and color identification to transport a spoon around a course and display a distance at the end of the course.

**Signals and Systems:*** The use of MATLAB to calculate and plot signals using mathematical

formulas derived in class. * + Convolution, Fourier series, impulse response, time and frequency domains.

**Fundamentals of Electromagnetics Lab:*** To physically interact and study electromagnetic concepts in a team format.
	+ Physics and design are discussed and presented after each group project.
	+ The examination of  and how magnets create current.
	+ The use of transformers to demonstrate induction in a handmade generator.

**Intro to EE & Fundamentals of Electronic Circuits Lab:*** In these classes we designed and tested CMOS digital and analog circuits.
	+ Example designs include the nand4, xor, and inverter circuits.
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| Software  | **Programming**: C, C++, VHDL, Assembly, Java, HTML, Unix, and MATLAB.**Mentor Graphics CMOS IC design**: schematic capture, simulation, layout and parameter extraction, VHDL simulation. |
| SelectedCoursework | Power Systems, Computer Engineering, Electromagnetics, Signals and Systems, Electronic Circuits, Engineering Design: Microprocessors, Methods, Intro to EE, Programming for Engineering and Science, Computer Science, Digital Logic, Electronics, Design Process, Engineering Analysis II, Embedded Control, Communication Systems, Project Design Procedures, Control System-State Variable Meathods, Thermodynamics. |
| Awards receivedHonorsOrganizations Non-academic projects Volunteer experience | Northern Arizona University, Dean’s list 2007-2008. Mid-Pacific High School Dean’s list 2006-2007.National Society of Collegiate Scholars 2008.Boy Scout’s of America, Eagle Scout, 2005.Boy Scout’s Eagle Project: The construction of a bulletin board for a local elementary school.Numerous community services with the Boy Scout’s of America, Mid- Pacific Institute, The Cathedral of St. Andrew (Institute of Human Services), Northern Arizona University food concession & cash register for sporting events. |
| References | Dr. Niranjan Venkatraman, Professor of EE. NAU. 928-523-0373 Niranjan.Venkatraman@nau.eduDr. Allison Kipple, Professor of EE. NAU. 928-523-5303 allison.kipple@nau.edu |
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