Jose V. Benavides 1158 Morse Ave #108 Sunnyvale, CA 94089 (602) 318-5255, Jose.V.Benavides@nasa.gov

Objective: Find a challenging full time engineering position

Experience:

2008 – 2009 MCT Inc./NASA Ames Research Center Moffett Field, CA

Hardware/Controls Engineer: Hypersonic Vehicles

- Modeling and simulation of 6DOF hypersonic vehicle by developing on, and enhancing a NASA Ames' advanced, real-time, high fidelity flight simulator capable of full pilot interaction with hardware in the loop and Simulink integration.
- Control system design, implementation, and evaluation for maximal impact on NASA hypersonic air-breathing Vision Vehicle design.
- Co-authored two research publications

2003 – 2007 Microchip Technology Inc. Chandler, AZ

Applications Intern

- Built, debugged, executed, and analyzed microcontroller test setup data resulting in significant design win
- Authored three published application articles demonstrating the use of Microchip products for embedded systems development
- Developed and taught short courses on embedded systems signal conditioning and embedded feedback systems at Microchip 05 & 07 Technology Conferences

Summer 06 & 07 International Business Machines Austin, TX

Co-op

- Power 7 VMX/Altivec Performance Verification
- Power 6 Server Firmware Bring-up

Education:

2001 – 2009 Arizona State University Tempe, AZ

- Bachelor of Science Electrical Engineering, Dec 2005
- Masters of Science Electrical Engineering (Control Systems), May 2009
- 3.5 GPA; 3.8 GPA in relevant courses (see below)

Relevant Courses:

- Signals and Systems
- Computer Controlled Systems
- Multivariable Control Systems
- Optimal Controls
- Feedback Systems
- Digital Signal Processing
- Linear & Nonlinear Systems
- Artificial Neural Networks

Skills:

- 68K & PIC Assembly Language
- Windows, Mac OS, Linux, AIX
- Linux/Unix Scripting
- HTML/CSS web programming
- C programming
- Printed Circuit Board layout design
- Excel, MATLAB & Simulink/S-Function programming
- Salsa Dancing

Other Activities:

- Developed & presented course on embedded control systems, Microchip 07' Technology Conference
- Developed a system for rapid prototyping of robust fault-tolerant embedded control systems using FPGAs & poster presentation; 3rd place Annual MGE@MSA/WAESO Student Research Conference 2007; Hispanics in Engineering National Conference 2006
- Developed robotics research kit & poster presentation; ASU Fulton Undergraduate Research Initiative (FURI) 2005; MAES International Symposium & Career Fair 2005
- Attended the Nomadic Engineering Design & Manufacturing ASU Summer Program touring three European countries including UK, France, and Spain. Summer 2005
- Past President, Vice President, Web Master, and founding member of MAES ASU (Mexican American Engineers and Scientists)
- Past MAES Regional Vice President Region 1: California, Arizona. 2006
- Co-Founder and Electrical Designer for High School F.I.R.S.T. (For Inspiration and Recognition of Science and Technology) Robotics Team 2000 - 2001
- Annual volunteer referee for regional F.I.R.S.T. tournament 2002 - 2007
- IEEE and SHPE (Society of Hispanic Professional Engineers) member
- NSF Computer Science, Engineering, Mathematics, and Science (CSEMS) Scholar
- GEM Fellowship recipient (National Consortium for Graduate Degrees for Minorities in Engineering and Science) 2006 - 2007