

# NATE A. MOEHRING

(602) 791-7144 cell

nate@themoehrings.com  
www.themoehrings.com/work/natework.asp

957 W Breckenridge Ave  
Gilbert, AZ 85233

---

## OBJECTIVE

Seeking employment in a cutting-edge technology company that values employees with proven problem-solving skills, a strong work ethic, and the ability to lead and communicate with people.

## PROFILE

Experienced embedded engineer with demonstrated results on projects requiring both software and hardware development. Thoroughly enjoys software engineering for embedded systems.  
Effective team leader resulting from years of leadership training and experience combined with a genuine concern for people.  
Excellent written and verbal communicator, experienced in writing reports, proposals, and delivering technical presentations.

## EXPERIENCE

Summer 2005-Present

**General Dynamics AIS – Integrated Space Systems**, Gilbert, AZ  
*Principal Software Engineer*

Developing ground software for the operation, automation, and testing of military and commercial satellite spacecraft.

Spring 2004-Summer 2005

**StarVision Technologies**, College Station, TX  
*Software Engineer*

Software and hardware development of a robotic mobile platform used in the testing and demonstration of an experimental navigation sensor system designed for Autonomous Aerial Refueling of Unmanned Aerial Vehicles.

Software development of a commercial star identification product based on star tracker technology.

Ported novel surface mapping algorithms written in Matlab into a C DLL to support real-time targets and improve execution speed.

Fall 2003

**Spacecraft Technology Center**, Texas A&M University, College Station, TX  
*Graduate Assistant Research*

Software development of a high resolution camera system to be used on the International Space Station. Prototyped all software subsystems and interfaces including the EXPRESS Rack Interface Controller, camera, digital data recorder, crew interface panel, and controller. Created an API to abstract the communication protocol and payload functionality to simplify development of the Ground Support Equipment software.

Summer 2000, 2003

**National Instruments (NI)**, Austin, TX  
*Internship – Research and Development*

Prototyped hardware and software to integrate a DSP into an existing NI FPGA product to add floating point processing capabilities.

Developed a prototype cross compiler from G to Lego Assembly to natively support Lego Mindstorm programming from NI LabVIEW. This has since developed into the software package included in Lego's Mindstorm NXT robotics kit.

Developed an automated testing system used in the production testing of PXI systems and to verify cross-product compatibility between NI's PXI products.

Summer 2001

**Advanced Energy Industries**, Fort Collins, CO  
*Internship – Research and Development*

Developed the hardware and software for a distributed I/O device used in the automated testing of intelligent power supplies. This device provides Modbus/TCP control of analog I/O, digital I/O, relays, and digital potentiometers.

Spring 2001-Fall 2002

**Enable Communications**, Bryan, TX

*Co-Founder, Engineer*

Startup technology company focused on consumer telephony and VOIP communication peripherals. Awarded support from the Bryan/College Station Economic Development Center's technology incubator.

Fall 1999-Spring 2003

**Department of Engineering Technology and Industrial Distribution**, Texas A&M  
*Graduate Assistant Research*

Development of a low-cost semiconductor tester designed to run in parallel with large ATEs to improve semiconductor-testing efficiency.  
Development of an experimental sobriety tester using an HP iPAQ.

*Graduate Assistant Teacher – Introduction to Electronics Technology*

Course instructor for an introductory electronics course teaching software tools (LabVIEW, Altera Max+Plus II, Cadence OrCAD) and fundamental electronics.

*Student Technician II – Automation Laboratory*

Developed an electrical arc emulator used in the development of intelligent power supplies for semiconductor manufacturing.

Developed the firmware for a closed-loop pressure control device.

## LANGUAGES

LabVIEW, Java, C++ STL, C, C#, Visual Basic  
Motorola assembly, MIPS assembly, Lego assembly  
VBScript, ASP, PHP, PERL, HTML, JavaScript, SQL

## SOFTWARE

National Instruments LabVIEW, Visual Studio .NET, Borland C++ Builder  
Rational Rose, Microsoft Visio, Office, Project  
Cadence OrCAD, Altera MAX+plus II, Matlab, Simulink, Maple  
Windows, DOS, Linux, UNIX

## EDUCATION

Fall 2003

**Texas A&M University**, College Station, TX

*Master of Science in Management Information Systems, Enterprise Development*

GPA Overall: 4.0

Fall 2001

*Bachelor of Science in Electronics Engineering Technology*

GPA Overall: 3.442                      GPA in Major: 3.875

## HONORS

Fall 2005

Silver Eagle Award, General Dynamics C4S

Fall 2005

Department of the Year, Ground Software, General Dynamics C4S - SASS

Fall 2001

Outstanding Senior Award, Electronics Engineering Technology

Spring 1998-Spring 1999

Texas A&M University Dwight Look College of Engineering Distinguished Student Award

Spring 1997

Valedictorian, Bandera High School

## ORGANIZATIONS

Fall 2004

BEST Mentor (Boost Engineering Science and Technology) – Robotics Competition

Fall 2001-Fall 2003

Aggie Lutherans – Campus Ministry, Vice President 2002

Fall 2001-Present

Golden Key International Honour Society

Fall 1999-Fall 2001

Tau Alpha Pi – Engineering Technology National Honor Society, President 2000

Fall 1998-Spring 2002

Institute of Electrical and Electronics Engineers (IEEE)

Fall 1997-Spring 2005

Young Adult Resource Persons (YARPs) – Youth Ministry, Coordinator 2003-2005