Marvin L. Smith

CONTACT INFORMATION	207 Imperial Blvd, Reno, NV 89503	*E-mail:* marvin_smith1@me.com *Cell:* (775) 997-4261 *www: marvinsmith3.wordpress.com* *Github: http://github.com/marvins* *StackExchange: msmith81886*

WORK
EXPERIENCE

Software Engineer, ISR Group
Sierra Nevada Corporation, Sparks, NV
January 2012 - Present

- Assisting on the software development and integration teams for the Gorgon Stare Wide Area Surveillance Program.

- Tasks:
  - Currently assisting with image processing and algorithm development for Wide Area Surveillance systems.
  - Implemented Information Assurance procedures and ensured compliance with DoD Security Technical Implementation Guides (STIGs) for Windows and Linux systems on our project.
  - Assisted with system configuration and network troubleshooting of Linux systems.
  - Assisted with development of technical data for project software and hardware.
  - Assisted with training of technician personnel for project software and hardware.

Intern, Intelligent Robotics Group, NASA Ames Research Center,
Mountain View, CA

- June 2011 - August 2011

  Developed a crater detection algorithm for use in planetary surface characterization and terrain reconstruction. Primary use is for the alignment of LIDAR data from the LRO Satellite to images taken from the Apollo 15 and 17 missions.

- June 2010 - August 2010

  Developed algorithms for the open-source NASA Vision Workbench library which removes outliers from stereo reconstructions of the lunar surface.

Staff Sergeant, Nevada Air National Guard,
Guidance and Control Shop, Avionics Flight, 152 MXS, Nevada Air National Guard
August 2006 - February 2014

- Instrumentation and Flight Controls Journeyman (2A553B).

- Maintenance and repair of USAF C-130 Guidance and Control Systems. Systems include Engine Instrumentation, Autopilot, Fuel Quantity, Digital Flight Data Recorder, and Flight Director.

- Operation Enduring Freedom Deployment, Bagram AB, Afghanistan
  August 2009 - December 2009

- Operation Iraqi Freedom Deployment, Talil AB, Iraq
  October 2007 - January 2008

- Active Security Clearance

Undergraduate Assistant, Computer Vision Lab,
Department of Computer Science and Engineering, University of Nevada, Reno
August 2010 - May 2011, August 2011 - January 2012

- Teaching Assistant
  - CS 302, Data Structures: CS 474, Image Processing: CS 485, Computer Vision
  - Instructor: Dr. George Bebis

Co-Op, Special Programs Division,
Nevada Automotive Test Center, Silver Springs, NV
May 2009 - January 2009

- Primary task was to aid in the testing and implementation of electronic systems for the USMC Marine Personnel Carrier Technology Demonstrator vechicle.

- Wrote feasibility reports on electrical systems used, researched and compared COTS electronic solutions with Mil-Std and SAE requirements, as well as bench-tested electronic systems prior to installation.

EDUCATION

University of Nevada, Reno, Reno, NV

Master of Business Administration (Expected Graduation: May 2016)
- Interests: Project/Engineering Management
- Completed Courses: Introduction to Patent Law

University of Nevada, Reno, Reno, NV

Bachelors of Science, Computer Science (Graduated: May 2012)
- UNR GPA: *3.65*, CS GPA: *3.6*
- Adviser: Dr. George Bebis
- Area of Interest: Computer Vision, Artificial Intelligence, Image Processing
- Specialized Undergraduate Courses: Computer Vision, Advanced Computer Vision, Artificial Intelligence, Simulation Physics, and Image Processing.
- Graduate Courses Completed: Machine Learning, Computer Graphics.

Nevada Air National Guard 152 Maintenance Squadron, 152 Air Wing, Reno, NV

2A553B, Instrumentation and Flight Controls Journeyman
- Instrumentation and Flight Controls Craftsman Course, (Currently Taking)
- Airman Leadership School, Correspondance, May 2011
- Instrumentation and Flight Controls Apprentice School,
  Sheppard Air Force Base, TX, June 2007
- Electronic Principles School,
  Keesler Air Force Base, MS, January 2007
- Basic Military Training,
  Lackland Air Force Base, TX, November 2006

TECHNICAL SKILLS

- **Programming Languages/Tools**: C++, Python, Matlab, LaTeX, PowerShell, and Bash.

- **Software Experience**:

  - Image Processing : OpenCV, Matlab, NASA Vision Workbench
  - Numerical Computation : Numerical Python, FLANN, LibSVM
  - GIS : GDAL, GeoServer, OpenLayers, Google Earth Enterprise deployments
  - Misc : Qt

- **System Administration**: Secure Configuration Management deployment (git, svn, Artifactory), constructing software build systems (Jenkins), and computer networking.

- **Mechanical**: Electronics repair, Soldering, Hand/Power Tools, use of Military/Civilian technical manuals and wiring diagrams.

- **Math**: Multivariable Calculus, Linear Algebra, some Signal Processing

PUBLICATIONS

- Marvin Smith, Ara Nefian, "Outlier removal in stereo reconstructions of orbital images", International Symposium on Visual Computing, 2010.

GROUPS

President, Association for Computing Machinery, UNR (Jan 2010 - May 2011)

Member, Enlisted Association for the National Guard (EANGUS)

Member, Resource Protection Team, 152 Security Forces Squadron, NVANG

REFERENCES

- Dr. George Bebis
  Chair, Department of Computer Science and UNR Computer Vision Lab Director
  Phone: 775-784-6463

- Dr. Ara Nefian
  Senior Research Scientist, NASA Ames Research Center
  Phone: 650-604-0845

- Master Sergeant Jon Wolland
  Guidance and Control Shop Supervisor, 152 MXS, NVANG
  Phone: 775-788-4565