CURRICULUM VITAE

1. Personal Data

Name: Juan Carlos Fernández Díaz
Date of Birth: August 18th 1976
Place of Birth: Tegucigalpa M.D.C. Honduras
Nationality: Honduras
Electronic Mail Address: jfernandezhon@yahoo.com
Web site: http://www.geocities.com/jfernandezhon/

United States Address and Phone (Current)

Home Address: 615 NW 15th Street, Gainesville, Fl. 32603, USA
Mobile Phone #: 1-(352)-562-2966

Honduras Address and Phone (Alternate Address)

Home Address: Colonia Miramonte, 5ta Calle, Casa #86, Contiguo a las bodegas del IHSS, Tegucigalpa M.D.C., Honduras.
Home Telephone: (504) 232-2222 / (504) 235-5878

2. Academics

Graduate Level: **University of Florida, College of Engineering**
Geosensing System Engineering program
August 2005 to current day
Degree: Master of Science, (August, 2007), currently working on PhD

Universidad Católica de Honduras
Master Business Administration
April 2002 to July 2005
Degree: MBA with Finance Orientation, Summa Cumm Laude Distinction

Undergraduate: **Universidad Nacional Autónoma de Honduras**
College of Engineering
August 1993 to October 2000
Degree: BS in Electrical and Industrial Engineering, (June 2001).

Preschool to High School: **Elvel School**, Tegucigalpa, M.D.C., Honduras. 1982-1993
Degree: Bachelors in Arts and Sciences, US compliant High School Diploma

3. Professional Experience

August 2005 to date

University of Florida, Geosensing Systems Engineering Division & NSF National Center for Airborne Laser Mapping www.ncalm.ufl.edu
Gainesville, Florida, USA

Position:
Duties:

Graduate Student / Research Assistant

- Support the ongoing research on LiDAR Mapping data collection and processing.
- Develop tools and techniques for terrestrial laser scanning and mapping for scientific applications.
- Support the development, integration and implementation of the Mobile Terrestrial Laser Scanning and Mapping System.
- Support the development of new mapping LiDAR sensors.

June – August 2008	**International Space University** http://www.isunet.edu/ **Space Studies Program 2008 held in Barcelona, Spain** **Teaching Associate** for Team Project "The Use of Space Technologies for Monitoring Volcano Hazards"
June – August 2007	**International Space University** http://www.isunet.edu/ **Space Studies Program 2008 held in Beijing, People's Republic of China** **Teaching Associate** for Team Project "The Use of Space Technologies to Monitor and Respond to Earthquakes"
August 2003 to July 2005 *Position:* *Duties:*	**America Movil (NYSE: AMX) operation in Honduras** Tegucigalpa, Honduras http://www.claro.com.hn/ **Wireless Mobile Telephone Network Quality Assurance Chief** • Assure the wireless costumers technical satisfaction. • Assure network operations to be within the required key performance indicators established for the America Movil networks in Latin America. • Provide link and feedback between Network Planning and Network Operation & Maintenance engineering units. • Provide support to the Regulatory Affairs Branch in issues regarding to network quality of service.
October 1997 to August 2003 *Position:* *Duties:*	**Comisión Nacional de Telecomunicaciones** www.conatel.hn Tegucigalpa, Honduras **Technical Advisor, Radioelectric Spectrum Management Direction** • Technical analysis of radio communication systems prior to frequency assignments. • Planning and management of microwave bands. • Database design, maintenance and development for radioelectric spectrum management of Honduras. • Design, maintenance and development of computational tools for radioelectric propagation. • Preparation of regulatory and normative proposals for radio communication systems and services.
July to September 1997 *Position:* *Duties:*	**California Institute of Technology / Jet Propulsion Laboratory** Pasadena, California, USA **Research Fellow** "*Summer Undergraduate Research Fellowship" (SURF)* • *Digital data a*nalysis and interpretation for the "Near Infrared Mapping Spectrometer (NIMS)" experiment on board the Galileo spacecraft.
April 1996 *Position:* *Duties:*	**European Space Agency / European Space Astronomy Centre** Villa Franca del Castillo, Madrid, España Trainship at the European Space Agency Satellite Tracking Station at Villa Franca del Castillo, Madrid, Spain on computational data analysis and telecommunications.
1994-1997 *Position:* *Duties:*	**Observatorio Astronómico Universidad Nacional Autónoma de Honduras** http://www.oacs-unah.edu.hn/ **All Instructor** • Management and maintenance of the computational and astronomical equipment. • Development of practical experiences for the "Introduction to Astronomy" course.

4. Language Skills

	Reading	Writing	Speaking
Spanish	100 %	100 %	100 %
English	100 %	100 %	100 %

5. Awards, Scholarships and Fellowships

1. **University of Florida Alumni Graduate Award** to carry PhD studies between 2007 and 2011 in the field of Geosensing Systems Engineering.
2. **International Space University (ISU)** scholarship to participate in the **2006 ISU Summer Session Program**, held in Strasbourg, France from July 3rd to September 1st, 2006.
3. **United States Department of State, Fulbright Scholarships Program**. Graduate Studies Scholarship to participate in the **University of Florida Geosensing Systems Engineering** program. 2005-2007.
4. **United States Department of State International Visitor Program** invitation to the international seminar on "**Telecommunications, Information Technologies & the Internet**". (Washington D.C.; Seattle, Washington; Grand Island, Nebraska; Austin, Texas; Tampa, Florida). July 14th – August 1st 2003.
5. **Organization of the American States** Scholarship to participate in the "**Regulation and New IP Services**" course.
6. **United Nations** Grant to participate in the **Space Generation Forum** for the **Third United Nations Conference for the exploration and peaceful uses of other space (UNISPACE III)**, Viena y Graz, Austria, July 19 – 30, 1999
7. **Organization of the American States** Scholarship to participate in the "Radioelectric Spectrum Management" course, Mexico D.F. November 23 – 27, 1998.
8. "***Summer Undergraduate Research Fellowships (SURF)***", **California Institute of Technology** research at the **NASA Jet Propulsion Laboratory** (JPL/NASA). July - September 1997
9. First Place at the student category at the First National Science and Technology Contest of Honduras, organized by the **National Council for Science and Technology** (COHCIT), April 1997.
10. Trainship at the **European Space Agency** Satellite Tracking Station in Villa Franca del Castillo, Madrid, Spain April 1996.

6. Publications

6.1 Journal Papers

Loudermilk, E.L., J.K. Hiers, J.J. O'Brien, R.J. Mitchell, A. Singania, J.C. Fernandez, W.P. Cropper, Jr., and K.C. Slatton. 2009. Ground-based LIDAR: A novel approach to quantify fine-scale fuelbed. International Journal of Wildland Fire (in press)

6.2 Conference Papers

Loudermilk, E.L., A. Singhania, J. Fernandez, J. Kevin Hiers, J.J. O'Brien, W.P. Cropper, Jr. and K.C. Slatton. 2007. Application of ground-based LIDAR for fine-scaled forest fuel modeling. In: Proceedings of The 2nd Fire Behavior and Fuels Conference. The Fire Environment – Innovations, Management, and Policy; Destin Florida, March, 2007. Rocky

Mountain Research Station, U.S. Department of Agriculture, Forest Service Proceedings RMRS-P-46.

6.3 Conference Poster Presentations

Fernandez, J. C.; Shrestha, R. L.; Carter, W. E.; Slatton, C. K.; Singhania, A.. The UF GEM Research Center Mobile Terrestrial Laser Scanner System M-TLSS Applied to Beach Morphology Studies in St. Augustine, Florida. American Geophysical Union, Fall Meeting 2006, abstract #G53C-0913

Singhania, A.; Fernandez, J. C.. On the Potential Implementation of Ground-based Scanning & Imaging LIDARs on Future Surface Planetary Exploration Missions. American Geophysical Union, Fall Meeting 2006, abstract #P51C-1211

6.4 Conference Oral Presentations

Presented for Slatton, K. C.; Cossio, T.; Carter, W. E.; Shrestha, K.. Topographic and Bathymetric Surface Mapping Using Low-SNR Airborne Lidar. American Geophysical Union, Fall Meeting 2008, abstract #G51C-08

Overview of the NSF National Center for Airborne LASER Mapping (NCALM). Second National Lidar Initiative Meeting (May 2008). USGS, Reston, Va. http://lidar.cr.usgs.gov/national_lidar_2008.php

6.5 Thesis and Reports

An Overview of Lidar Point Cloud Processing Software. Adaptive Signal Processing Laboratory Report. http://www.aspl.ece.ufl.edu/reports/GEM_Rep_2007_12_001.pdf

Scientific applications of the Mobile Terrestrial Laser Scanner (M-TLS) system. Masters Thesis. University of Florida, 2007. http://purl.fcla.edu/fcla/etd/UFE0021101

SOL: Earth Observation Systems for Small Countries and Regions. International Space University, 2006 Summer Session Program Team Project Report. http://ssp06.isunet.edu/index.php?option=com_content&task=view&id=164&Itemid=142

Percepcion de la Poblacion de Tegucigalpa Sobre los Riesgos de Salud Asociados a los telefonos moviles y sus Estaciones Base. Origenes, Fundamentos y el Impacto en el Desarrollo de la Industria de las telecomunicaciones en Honduras. MBA Thesis Report (2005).

Updated: February 27th, 2009