

GIOVANA MIRA DE ESPINDOLA, MSc
CURRICULUM VITAE

Personal Information

Nationality: Brazilian
Date of Birth: August 23rd, 1980
Gender: Female



Residential
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Professional
Organizations: National Institute for Space Research (INPE)
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Academic Background

Since March 2007, PhD Student

National Institute for Space Research (INPE), Remote Sensing Program
São José dos Campos, Brazil
Thesis Proposal: Modelling deforestation and its intraregional interactions in the Brazilian Amazon rainforest.
Supervisors: Dr. Leila Fonseca, Dr. Ana Paula Dutra de Aguiar, Dr. Gilberto Câmara, Dr. Edzer Pebesma.

March 2004 – August 2006, MSc in Remote Sensing

National Institute for Space Research (INPE), Remote Sensing Program
São José dos Campos, Brazil
Thesis (in Portuguese): "Parameter selection for region-growing image segmentation algorithms using spatial autocorrelation".
Supervisors: Dr. Gilberto Câmara, Dr. Antônio Miguel Vieira Monteiro

January 1998 – November 2002, Cartography Engineer

Military Institute of Engineering (IME)
Rio de Janeiro, Brazil
Final Project (in Portuguese): "Study of the mapping potential of the CBERS CCD satellite images".
Supervisors: Dr. Oscar Ricardo Vergara, Dr. Clóvis Gaboardi

Languages

Portuguese: mother tongue
English: advanced
German: beginner

Courses

2008, São José dos Campos, Brazil

Institution: National Institute for Space Research (INPE)

Title: "A sociedade como objeto de conhecimento científico: a perspectiva interdisciplinar e o papel social da ciência".

Coordinators: Dr. Ana Paula Dutra de Aguiar, Dr. Roberto Araújo

Period: 15/05/2008 – 11/08/2008

Credit Hours: 33hours

2008, São José dos Campos, Brazil

Institution: National Institute for Space Research (INPE)

Title: Principles of Statistical Modelling

Coordinators: Dr. Trevor Bailey

Period: 07/04/2008

Credit Hours: 8hours

2008, Münster, Germany

Institution: Institute for Geoinformatics at the University of Münster

Title: Spring School on GIScience

Coordinators: Dr. Werner Kuhn

Period: 02/03/2008 – 15/03/2008

Credit Hours: 90hours

2007, Rio de Janeiro, Brazil

Institution: Pontifical Catholic University of Rio de Janeiro

Title: Mapping from Space

Coordinators: Dr. Karsten Jacobsen

Period: 26/03/2007 – 30/03/2007

Credit Hours: 48hours

2005, Curitiba, Brazil

Institution: Federal University of Paraná

Title: Airborne Laser Scanning

Coordinators: Dr. Norbert Pfeifer

Period: 16/05/2005 – 17/05/2005

Credit Hours: 8hours

Professional Experience

Consultant, Mensura Consultoria em Geoinformação Ltda

Period: Since 06/2009

Responsible for project manager and business development in Geoinformatics.

Professor, Instituto Federal de Educação, Ciência e Tecnologia do Piauí

Period: 11/2009

Professor of Digital Image Processing.

Professor, SENAC

Period: 09/2009

Professor of Digital Image Processing.

Consultant, Santiago & Cintra Consultoria Ltda

Period: 05/2008 – 04/2009

Responsible for marketing and selling strategies of commercial satellite imagery and tools from the following international companies: RapidEye (Germany) and ERDAS (US).

Consultant, Network for Environmental Modelling of Amazon (GEOMA)

Period: 06/2008 – 01/2009

Investigator in the area of spatial databases and spatial environmental models.

Responsible for setting up statistical analysis based on scientific issues and considering the underlying causes of deforestation in the Amazon, Brazil.

Professor, Vale do Paraíba University (UNIVAP)

Period: 10/2008 – 12/2008

Professor of Cartography, Remote Sensing and Geoinformatics.

Product Management Leadership, Imagem Geosistemas e Comércio Ltda

Period: 08/2005 – 04/2007

Responsible for marketing and selling strategies of commercial satellite imagery from the following international companies: DigitalGlobe (US), Spot Image (France), Infoterra (Germany) and Antrix Corporation (India).

All the activities involved the use of various marketing tools: development of business and marketing plans, pricing strategies, promotions, product positioning, sales team leadership and training, and visiting key clients. I was also responsible for the Imagem Company relationship with those companies.

Other activities included the prospect of new aerial and remote sensing imagery products. I was responsible for prospecting and closing the international partnership agreement between Imagem Company and Antrix Corporation. I was also responsible for prospecting contacts with GeoEye (US), RapidEye (Germany) and JAXA (Japan) companies.

Related to internal company processes, I was responsible for implementing new internal procedures that consider the best practices based on Six Sigma and PMI (Project Management Institute) approaches.

Manager, Diretoria de Serviço Geográfico, Brazilian Army

Responsible for developing solutions for photogrammetry and remote sensing analysis. Redesigned the methodology of cartographic update using remote sensing

data and introduced the concept of automated image analysis and object-oriented image classification.

Projects

FAPESP, Research Workshop, 2009

Institute for Geoinformatics, University of Münster, Germany, and the National Institute for Space Research (INPE), Brazil.

Project N°: 2008/11604-6

FAPESP, Research Programme on Global Climate Change, 2009

Land use change in Amazonia: institutional analysis and modeling at multiple temporal and spatial scales.

Project N°: 08/58112-0

Scholarships

CAPES, Doctoral Scholarship

National Institute for Space Research (INPE)

Period: since 03/2007

DAAD, Short-term Scholarship

Institute for Geoinformatics (ifgi) at the University of Münster

Period: 02/2010 – 07/2010

CAPES, Master Scholarship

National Institute for Space Research (INPE)

Period: 03/2004 – 08/2005

CNPQ, Scientific Initiation

Military Institute of Engineering (IME)

Period: 01/2001 – 01/2002

References

Dr. Gilberto Câmara

Director General, National Institute for Space Research (INPE)

São José dos Campos, SP, Brazil

E-mail: gilberto.camara@inpe.br

Publications

DE ESPINDOLA, G. Emprego dos índices de autocorrelação espacial na avaliação da segmentação de imagens de sensoriamento remoto. **IV Colóquio Brasileiro de Ciências Geodésicas**. Curitiba, 2005.

_____. Uso de algoritmos genéticos no ajuste de parâmetros da segmentação de imagens. **XIV Simpósio Brasileiro de Sensoriamento Remoto**. Natal, 2009.

DE ESPINDOLA, G., A. D. AGUIAR and G. CAMARA. Modelling deforestation and its intraregional interactions in the Brazilian Amazon: market pressure versus public policies. **Conferência Amazônia em Perspectiva: Ciência Integrada para um Futuro Sustentável**. Manaus, 2008.

DE ESPINDOLA, G. and G. CAMARA. Ajuste de parâmetros no algoritmo de segmentação de imagens do software e-Cognition. **XIII Simpósio Brasileiro de Sensoriamento Remoto**. Florianópolis, 2007.

DE ESPINDOLA, G., G. CAMARA, I. A. REIS, L. S. BINS and A. M. MONTEIRO. Spatial autocorrelation indicators for evaluation of remote sensing image segmentation algorithms. **2005 Annual Conference of the International Association for Mathematical Geology**. Toronto, 2005a.

_____. Parameter selection for region-growing image segmentation algorithms using spatial autocorrelation. **International Journal of Remote Sensing**, v.27, n.14, p.3035–3040. 2006.

DE ESPINDOLA, G. and D. C. CORBARI. Revisão histórica da geodésia e cartografia. **II Encontro de Iniciação Científica**. Rio de Janeiro, 2001.

DE ESPINDOLA, G., N. A. CRUSCO and J. C. EPIPHANIO. Aplicação da metodologia do PRODES Digital em imagens CCD/CBERS-2. **XII Simpósio Brasileiro de Sensoriamento Remoto**. Goiânia, 2005b.

DE ESPINDOLA, G. and E. PANTALEÃO. Parzen windows and nonparametric density estimation applied in high resolution imagery classification. **XIV Simpósio Brasileiro de Sensoriamento Remoto**. Natal, 2009.

DE ESPINDOLA, G., O. R. VERGARA and C. GABOARDI. Estudo das potencialidades cartográficas das imagens CCD do satélite CBERS. **X Simpósio SELPER**. Cochabamba, 2002.

_____. Avaliação das características temáticas e geométricas das imagens CCD do CBERS para fins cartográficos. **XXI Congresso Brasileiro de Cartografia**. Belo Horizonte, 2003.

_____. Avaliação das características temáticas e geométricas das imagens CCD do CBERS para fins cartográficos. **Revista Militar de Ciência e Tecnologia**, v.XI. 2004.

FELIX, I. M., M. L. KAZMIERCZAK and G. DE ESPINDOLA. RapidEye: a nova geração de satélites de Observação da Terra. **XIV Simpósio Brasileiro de Sensoriamento Remoto**. Natal, 2009.

MELO, A. Y. I., D. ALVES and G. DE ESPINDOLA. Perspectives on ethanol use by the transportation sector in Brazil. In: P. L. D. S. DIAS, W. C. RIBEIRO, *et al* (Ed.). **Public Policy, Mitigation and Adaptation to Climate Change in South América**. São Paulo: Instituto de Estudos Avançados da Universidade de São Paulo, 2009. Perspectives on ethanol use by the transportation sector in Brazil, p.103-116.

MELO, A. Y. I., G. DE ESPINDOLA and D. ALVES. Aquecimento global: o impacto da utilização do etanol nas emissões de CO₂ no Brasil. **III Conferência Regional sobre Mudanças Globais América do Sul**. São Paulo, 2007.

SOUZA, A. A. and G. DE ESPINDOLA. Relação entre parâmetros espectrais e biofísicos. **VIII Seminário de SR&GIS/Floresta**. Curitiba, 2008.