

Jesús Omar Ocegueda González

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EDUCATION

Center for Research in Mathematics (CIMAT)

Ph.D. Computer Science. Department of Computer Science, 2015 (Expected).

Grade: 9.9/10.0

Center for Research in Mathematics (CIMAT)

Master of Science. Department of Computer Science, August 2006.

Grade: 9.7/10.0

University of Guanajuato

Bachelor of Science. Computer Science, August 2004.

Grade: 9.3/10.0

PROFESSIONAL EXPERIENCE

Research Associate

Computational Biomedicine Lab
University of Houston.

January 2010 - July 2011

Developed algorithms and computational tools for 3D-face recognition.

Key accomplishments:

- 7 peer-reviewed publications
- Speed up our face recognition system from 1,000 to 2,000,000 facial signature comparisons per second, while improving recognition performance and robustness.

Optimization engineer

Applied Technology Center
PROLEC-GE

July 2008-December 2009

Developed algorithms for electrical transformer design and optimization.

Key accomplishments:

- Improved algorithms performance using parallelization
- Improved numerical stability of algorithms for electrical and mechanical computations

Software developer

Software Development Department
CIMAT

August 2006-July 2008

Development of the CIMAT's "Intelligent Blackboard", which is an educational interactive software for remote teaching.

Key accomplishments:

- Developed the handwritten Character Recognition and Sketch Recognition modules of the system
- Developed the communication module of the system (which transmits voice and data between two remote electronic blackboards)

ENGLISH PROFICIENCY

TOEFL ibt: total score 106/120, taken on March 12th, 2010. Listening 28/30. Speaking 22/30. Reading 27/30. Writing 29/30.

PROFESSIONAL AND RESEARCH INTERESTS

Statistical computing
Computer Vision
Constrained/unconstrained optimization
Convex Analysis
Artificial intelligence
Parallel computing
Software engineering

EXPERTISE

Skill (experience level, from basic to expert: 1-5)
Systems: Windows(4), Linux(3)
Languages: C/C++ (4), Java(J2SE) (2), Pascal(4), PHP(2), SQL(3), R(2)
GUI: Borland's VCL(4), MicroSoft's MFC(3), Nokia's Qt(3)
IDE: Borland C++ Builder(4), MS Visual Studio(4), Eclipse(2), Netbeans(2)
UML: StarUML(3), TopCoder UML Tool(3)
Parallel computing: posix threads (3), GPGPU(CUDA) (1)

HONORS AND AWARDS

- 4th Place. 1st Mexican Open Programming Competition (Guanajuato, Mx, 2007)
- National Department of Science and Technology (CONACYT) scholarship for graduate studies from August, 2004 to July, 2006
- Center for Research in Mathematics (CIMAT) scholarship for undergraduate studies from August, 1999 to July 2004
- Best C.S. student award from 2000 to 2004, University of Guanajuato
- Contestant in the World Finals of the International Collegiate Programming Contest, ACM (Beverly Hills, USA, 2003)
- 2nd Place. The 2002 ACM Central America Programming Contest (Querétaro, Mx. 2002)
- Contestant in the 11th International Olympiad in Informatics (Antalya, Turkey, 1999)
- 1st Place. 4th National Informatics Olympiad (México, Mx., 1999)
- Bronze medal. 1st Iberoamerican Informatics Competition (México, DF. 1998)

EXTRACURRICULAR ACTIVITIES

- Problem setter. 4th Mexican Open Programming Competition (Guanajuato, Mx, 2010)
- TopCoder rated member. Handle: [khayyam](#)
- Guanajuato State's Informatics Olympiad. Co-founder (1999) and Co-Organizer
Duties: activities related to the organization, diffusion and administration of the Informatics Olympiad in Guanajuato.

PUBLICATIONS

Please refer to my Google Scholar Profile ([Omar Ocegueda](#)): 10 publications, 72 citations, h-index: 4).