Camilo AGUILAR

Personal Information

Citizenship: Ecuador

Birthdate: 20 August 1991

Birthplace: Quito, Ecuador

Address:

Email: camilo-gabriel.aguilar-herrera@inria.fr

Website: https://www.aguilarh.com

Education

Purdue University   *Graduation: July 2020*
Doctor of Philosophy: Electrical Engineering
Research Area: Signal and Image Processing

University of California Irvine   *Graduation: March 2015*
Bachelor of Science in Electrical Engineering   *Cum Laude*
Specialization: Digital Signal Processing

Experience

June '16 – July '20
Inria
Sophia-Antipolis, France

Graduate Research Assistant
- Object tracking in high resolution satellite images

June '16 – July '20
Purdue University
Indiana, USA

Graduate Research Assistant
- Unsupervised segmentation in microscopy images (Statistical & Variational Models)
- Deep Learning Object Detection and Semantic Segmentation (Fast-RCNN, U-Net)
- 3D object reconstruction from x-ray CT volumetric images

Summer '18
Purdue University
Indiana, USA

Instructor - Data Structures & Algorithms
- Prepared projects, exams and daily lectures for a class of 35 students
- Instructor Rating: Excellent (4.7/5.0)

Jan '16 - May '16
Purdue University
Indiana, USA

Teaching Assistant - Data Structures & Algorithms
- Prepared and graded homework and projects
- Held office hours and covered makeup lectures for a class of 105 students

June '13 - Dec '14
Broadcom Corp
California, USA

Intern - Software & Hardware Engineer
- Created firmware for Set-Top-Boxes prototypes

Professional Skills

- ✓ Advanced C and Python Programming
- ✓ Matlab Programming
- ✓ Parallel Programming (OpenMP, MPI)
- ✓ Familiarity with CUDA
- ✓ Deep Learning (Pytorch)
- ✓ Web Development (Django)
- ✓ Machine Learning
- ✓ Familiarity with VHDL
- ✓ Fluent in English and Spanish
- ✓ Conversational in French and Dutch
- ✓ President of Ecuadorians at Purdue University

Publications

2020   **C.Aguilar,** M. Comer, I. Hanhan, R. Agyei, M. Sangid. "Void Detection and fiber extraction for statistical characterization of fiber-reinforced polymers". IS&T/SPIE Electronic Imaging, January 2020, Burlingame, CA, USA

2020   T. Li, **C. Aguilar**, R. Agyei, I. Hanhan, M. Sangid, M. Comer. "Connected-Tube MPP Model for Unsupervised 3D Fiber Detection". Electronic Imaging, January 2020, Burlingame, CA, USA.

2019   D.Kim, **C.Aguilar,** H.Zhao and M. Comer. "Narrow Gap Detection in Microscope Images Using Marked Point Process Modeling," in IEEE Transactions on Image Processing, vol. 28, no. 10, pp. 10.11

2018   **C.Aguilar**, M. Comer. "A Marked Point Process Model Incorporating Active Contours Boundary Energy," IS&T/SPIE Electronic Imaging, February 2018, Burlingame, CA, USA

2015   **C.Aguilar**, O.Shanta, T.Tran, D. Reinkensmeyer & S.Norman. "Towards a Low-Cost Alternative for BCI-aided Neurorehabilitation: A Comparison of the Emotiv Epoc to a Clinical EEG System," American Society of Neurorehabilitation Annual Meeting, Chicago, IL,