

**CAMILO ERNESTO VALDERRAMA CUADROS**

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**EDUCATION**

08/2015-present

PhD in Computer Science with Biomedical informatics concentration

Department of Mathematics and Computer Science, Emory University

Thesis: Developing affordable processing methods for detecting Intrauterine growth restriction in low-resource environments.

Supervisor: Dr. Gari Clifford

GPA: 3.88/4.00

01/2012-02/2014

Master in Informatics and Telecommunications

Department of Information and Communication Technology, Universidad Icesi

Thesis: Spectral Analysis of physiological signals for detecting pleasure and displeasure induced by visual stimuli

Supervisor: Dr. Gonzalo Ulloa

GPA: 4.84/5.00

07/2005-08/2011

Bachelor's degree in System Engineering (Hons.)

Department of Information and Communication Technology, Universidad Icesi

GPA: 4.50/5.00

**AWARDS, SCHOLARSHIPS AND FELLOWSHIPS**

**Awards**

- Honours Bachelor's Degree in Systems Engineering with Magna Cum Laude. Icesi University. 2011
- Dean's Honor Roll. Semesters 1st to 9th Bachelor's Degree in System Engineering. Icesi University. 2005-2011
- Ranked top 1% (fifth place of 4301 system engineering students) at the Test on the quality of higher education (ECAES – acronym in Spanish). The Colombian Institute for the Assessment of Education (ICFES). 2010

**Scholarships**

- *Colciencias Fulbright 2015 Scholarship for Phd Studies.*

**Fellowships**

- *Jóvenes Investigadores Colciencias Scholarship.* The Colombian Administrative Department of Science, Technology, and Innovation (COLCIENCIAS). 2013-2014.

- *Jóvenes Investigadores Colciencias Scholarship*. The Colombian Administrative Department of Science, Technology, and Innovation (COLCIENCIAS). 2012-2013.

## TEACHING EXPERIENCE

2016-2017

**Teaching assistance.** Emory University

Course instructor, tutoring, proctoring and grading. Courses taught:

- System Database (CS377). Spring 2017, Fall 2016, Spring 2016

2012-2015

**Adjunct professor.** Universidad Icesi

Course instructor, tutoring, proctoring and grading. Courses taught:

- Algorithms and programming I (2015-1, 204-2, 2014-1)
- Algorithms and programming II (2015-1, 204-2, 2014-1)
- Data structures and algorithms (2015-1, 2013-2, 2013-1, 2012-2)

06/2014-2015

**Adjunct professor.** Escuela Militar de Aviación Marco Fidel Suárez (EMAVI)

Course instructor, tutoring, proctoring and grading. Courses taught:

- Algorithm Analysis (2014-2)
- Simulation (2014-2)

## PROFESIONAL EXPERIENCE

02/2011-07/2011

**Internship as developer engineer.** Telecenter Panamericano DIRECTV

- Developed both a report and a data cube that show the main reasons why customers from Colombia, Ecuador, Peru and Argentina call to the DIRECTV's call center.
- Developed both a report and a data cube that show the main reasons why employees leave the DIRECTV's call center.

## RESEARCH EXPERIENCE

01/2016-present

**PhD student,** CliffordLab, Emory University, Atlanta, GA, USA.

Supervisor: Dr. Gari Clifford

- Developed and implemented an approach for assessing the quality of 1D-Doppler ultrasound signals recorded with a smartphone application.
- Working in developing a method that detects Intrauterine growth restriction by processing 1D-Doppler ultrasound signals recorded with a smartphone application in low-resource environments.

08/2011-05/2014

**Research Assistant**, Informatics and Telecommunications Research Group– i2t, Universidad Icesi, Cali, Colombia.

Supervisor: Dr. Gonzalo Ulloa

- Developed and implemented a method that processes and analyzes electroencephalographic signals to recognize, in an automatic way, the likeness of a subject observing a visual stimulus.

## PUBLICATIONS

### Articles in International Journals

CAMILO E. VALDERRAMA, and GONZALO ULLOA: Combining spectral and fractal features for emotion recognition on Electroencephalographic signals, In *WSEAS Transactions on Signal Processing*, vol.10, July 2014, pp 481-496. Available on <<http://www.wseas.org/multimedia/journals/signal/2014/a445714-269.pdf>>

### Articles in National Journals

CAMILO E. VALDERRAMA C., and G. ULLOA: Análisis espectral de parámetros fisiológicos para la detección de emociones, In *Revista S&T – Sistemas y Telemática*, vol. 20, March 2012, pp. 27-49. Available on <[http://www.icesi.edu.co/revistas/index.php/sistemas\\_telematica/article/view/1148/1519](http://www.icesi.edu.co/revistas/index.php/sistemas_telematica/article/view/1148/1519)>

### Articles in proceedings of National Conference

C.E. VALDERRAMA C., and G. ULLOA, Spectral Analysis of physiological parameters for emotion detection, In *Proceedings XVII Symposium of Image, Signal Processing, and Artificial Vision (STSIVA)*, 12-14 September, 2012, Medellin, Colombia. Available on <<http://ieeexplore.ieee.org/Xplore/defdeny.jsp?url=http%3A%2F%2Fieeexplore.ieee.org%2Fstamp%2Fstamp.jsp%3Ftp%3D%26arnumber%3D6340595&denyReason=134&arnumber=6340595&productsMatched=null&userType=inst>> .

## PROGRAMMING EXPERIENCE

Proficient with Java, MatLab

Experience with C#, PL/SQL, Python, Linux

## LANGUAGES

Spanish **Mother Language**

English **Advance**

## SKILLS

- Quantitative Analysis
- Problem Solving
- Logical Thinking
- Research
- Dedication