Juan Camilo Henao Londono

Curriculum Vitae

Grabenstr. 161
Duisburg, Germany

→ +49 (163) 284 9948

□ juanhenao21@gmail.com

□ juanhenao21.github.io

→ juanhenao21



Education

2018-Currently Ph. D. Physics, Universität Duisburg-Essen, Duisburg, Germany.

2015–2016 **PgD. Strategic Project Management**, Universidad Nacional de Colombia, Manizales, Colombia.

2012–2015 Master of Science in Physics, Universidad Nacional de Colombia, Manizales, Colombia.

2007–2012 Bachelor of Science in Engineering Physics, Universidad Nacional de Colombia, Manizales, Colombia.

Master Thesis

Title Surface roughness estimation by 3D stereo SEM reconstruction.

Advisors Juan Carlos Riaño Rojas, Juan Bernardo Gómez Mendoza

Description Scanning Electron Microscopy (SEM) stereo pairs are used to estimate the surface roughness of materials, using dynamic programming and stereo-vision to obtain three-dimensional information.

Professional Experience

April/2019 Currently Lecturer, Universität Duisburg-Essen, Duisburg, Germany.

In the summer semester (April-September), to prepare the solution of the exercises of the econophysics course to explain to the students. In the winter semester (October-March), to prepare, to lead laboratory sessions and to grade the reports of the advance laboratory "statistical time series analysis".

February/2015

June/2018

Lecturer, Universidad Nacional de Colombia, Manizales, Colombia.

To prepare, apply and grade tests, experiments and laboratory reports. To prepare and dictate class, lead laboratory sessions and direct group work. Teach one or more subjects to bachelor students (theoretical physics, physics laboratory, calculus).

January/2017 Lecturer, Universidad Autónoma de Manizales, Manizales, Colombia.

May/2018 To prepare, apply and grade tests, experiments and laboratory reports. To prepare and dictate class, lead laboratory sessions and direct group work. Teach one or more subjects to bachelor students (theoretical physics, physics laboratory, calculus).

Languages

Spanish Native

English Near-native TOEFL iBT Total Score: 98/120.

French Near-native DALF, C1 Level in accordance with the Common European Framework of Reference for Languages

German Intermediate Carl Duisberg Center Cologne, German as a foreign

language, competence level B2

Computer Skills

OS Linux, Windows Programming Python, C/C++, FORTRAN

Scientific Matlab, Octave, Mathe- Typography LATEX, Office matica, Origin

Event Participation

- April 2019 **DPG-Frühjahrstagung**, *Universität Regensburg*, Regensburg, Germany.

 (Participant)
- September XXVI Congreso Nacional de Física, Universidad Nacional de 2015 Colombia, Manizales, Colombia.

 (Participant)
- July 2015 XX Congreso Colombiano de Matemáticas, Universidad Nacional de Colombia, Manizales, Colombia.

 (Poster)
- July 2014 International Conference on Image Processing, Computer Vision, and Pattern Recognition IPCV'14, Monte Carlo Las Vegas, Resort and Casino, Las Vegas, USA.

 (Speaker)
- September III Congreso Nacional de Ingeniería Física, Universidad EAFIT, 2012 Medellin, Colombia. (Participant)
- February 2012 **VI Seminario Internacional de Ingeniería Biomédica**, *Universidad de los Andes*, Bogota, Colombia. (Participant)

- October 2011 XXIV Congreso Nacional de Física, Hotel Tequendama, Bogota, Colombia.

 (Speaker)
 - July 2010 IX Latin American Workshop on Magnetism, Magnetic Materials and their Applications (LAW3M), Universidad Nacional de Colombia, Manizales, Colombia.

 (Participant)
 - May 2009 I Congreso Nacional de Ingeniería Física, Universidad Nacional de Colombia, Manizales, Colombia.

 (Participant)

Academic Discussion

- February 2017 J. C. Henao-Londoño, O. D. Arbeláez-Echeverri, J. D. Agudelo-Giraldo, E. Restrepo-Parra, Spontaneous Perpendicular Anisotropy in Ultra-thin Ferromagnetic Films, Journal of Superconductivity and Novel Magnetism, doi:10.1007/s10948-017-4005-9.
 - July 2014 J. C. Henao, J. Meunier, J. B. Gómez-Mendoza and J. C. Riaño-Rojas, SEM Surface Reconstruction using optical flow and Stereo Vision, Proceedings of the 2014 International Conference on Image Processing, Computer Vision, and Pattern Recognition (IPCV'14), 2014.

Complementary Education

- January 2016 **Ph. D. Summer School UC 2016**, Faculty of Physics, Universidad Católica de Chile, Santiago.
 Chile
- Autumn 2014 **Research Internship**, Laboratoire de traitement d'images, Université de Montréal, Montreal.

 Canada
- February 2012 **Intensive Course**, Curso Análisis de imágenes biológicas, Universidad de los Andes, Bogota.

 Colombia
 - July 2010 Intensive Course, Latin American School on Magnetism, Universidad Nacional de Colombia, Manizales. Colombia

Achievements

2018 **Doctoral Programmes in Germany Scholarship**, *DAAD*, Universität Duisburg-Essen, Duisburg.

Germany

- 2014 "Jóvenes Investigadores e Innovadores 2013" Scholarship, Colciencias, Universidad Nacional de Colombia, Manizales.
 Colombia
- 2013 "Emerging Leaders in the Americas Program (ELAP)" Scholarship, Government of Canada, Université de Montréal, Montreal.
 Canada
- 2013 "Jóvenes Investigadores e Innovadores 2012" Scholarship, Colciencias, Universidad Nacional de Colombia, Manizales.

 Colombia