David Pérez Piñeiro

Curriculum Vitae (October, 2022)

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EDUCATION

PhD in Chemical Engineering

Aug. 2019 – present

Norwegian University of Science and Technology (NTNU)

- Advisor: Prof. Sigurd Skogestad.
- Research topic: Optimization and control of energy systems and markets.
- Currently on a visiting research stay at Stanford for 6 months working with Prof. Stephen P. Boyd on convex optimization and applications to dynamic management of energy networks.

Master's in Natural Gas Technology

Aug. 2017 – June 2019

Norwegian University of Science and Technology (NTNU)

- Advisors: Profs. Truls Gundersen, Johannes Jäschke, and Richard D. Braatz.
- Research stay at MIT to complete my master's thesis funded by La Caixa Foundation.
- Master's thesis: Self-optimizing control of a continuous-flow pharmaceutical manufacturing plant.

Bachelor's in Energy Engineering

Sept. 2013 – June 2017

University of Vigo

- Graduated with honors.
- Fourth year completed at NTNU as an exchange student with an Erasmus scholarship.

EXPERIENCE

Visiting Student Researcher

Oct. 2022 - present

Stanford University

PhD Student Aug. 2019 – present

Norwegian University of Science and Technology (NTNU)

Visiting Student Researcher

Jan. 2019 - June 2019

Massachusetts Institute of Technology (MIT)

GRANTS AND AWARDS

La Caixa Fellowship

2017

La Caixa Foundation

A total of 65 scholarships are awarded each year in Spain by the La Caixa Foundation for an outstanding academic trajectory. It covers the full tuition fee in any master's program of my choosing and the living expenses.

Erasmus Programme

Received this scholarship from the European Union to partially fund my stay at the Norwegian University of Science and Technology (NTNU) during the last year of my bachelor's.

Academic Excellence Award

2014

University of Vigo

Award given by the University of Vigo to the students with the best academic transcripts for the academic vear 2013-14.

Extraordinary Award for High School Studies

2013

Xunta de Galicia

Received this distinction given by the Autonomous Region of Galicia to the students with the best academic transcripts during their High School studies.

LANGUAGES

Spanish (native speaker), Galician (native speaker), English (97, TOEFL ibt).

PUBLICATIONS

Journal publications

1. C. Zotică, D. Pérez-Piñeiro, and S. Skogestad (2021). "Supervisory Control Design for Balancing Supply and Demand in a District Heating System with Thermal Energy Storage". Computers & Chemical Engineering 149, p. 107306.

Conference publications

- C. Zotica, D. Pérez-Piñeiro, and S. Skogestad (2020). "Optimal Operation and Control of a Thermal Energy Storage System: Classical Advanced Control versus Model Predictive Control". Proceedings of the 30th European Symposium on Computer Aided Process Engineering. Vol. 48, pp. 1507–1512.
- D. Pérez-Piñeiro, A. Nikolakopoulou, J. Jäschke, and R. D. Braatz (2020). "Self-Optimizing Control of a Continuous-Flow Pharmaceutical Manufacturing Plant". Proceedings of the 21st IFAC World Congress. Vol. 53. 2, pp. 11601–11606.

SOFTWARE SKILLS

- Scientific computing: Python, Julia, Matlab.
- Document preparation: LATEX, Word, PowerPoint.
- Vector graphics drawing: Ipe, Inkscape.

REFEREE DETAILS

Provided upon request.