J. de Curtó i DíAz.

IEEE Member. ACM & SIGGRAPH Member. SIAM Member. IEEE Computer Society.
IEEE Robotics and Automation Society. IEEE Aerospace and Electronic Systems Society.
IEEE Information Theory Society. IEEE Signal Processing Society. IEEE Communications Society.
SIAM Activity Group on Discrete Mathematics. SIAM Activity Group on Imaging Science.
SIAM Activity Group on Computational Science and Engineering.
SIAM Activity Group on Data Mining and Analytics.
decurtoidiaz@ieee.org decurtoidiaz@acm.org decurtoidiaz@siggraph.org
member.acm.org/∼decurtoidiaz

GENERAL INFORMATION	E-mail: c@decurto.tw
	Webpage: www.decurto.tw
	Phone: +1 (412) 407-6797.
	Nationality: Catalunya (Regne d'Espanya).

CAREER
(SELECTED)

Iris Lunar Rover. **Carnegie Mellon**. Pittsburgh.
BRAIN Team. Co-Lead with R. A. Duvall. September 2020 - till now.
Founding member of a small research unit that works at the forefront of research in space exploration in the context of planetary rovers.

Iris Lunar Rover. **Carnegie Mellon**. Pittsburgh.
Teleoperations. Research Engineer. September 2020 - till now.
Integral part of the team that is developing a SLAM and VIO solution for the rover that will be deployed on the Moon in 2021.

Universitat Rovira i Virgili. Tarragona.
Research Scholar. September 2018 - September 2020.
Group of Intelligent Robotics and Computer Vision.

The Chinese University of Hong Kong (CUHK). Hong Kong.
Research Assistant. October 2017 - February 2018.
Department of Computer Science and Engineering.

Carnegie Mellon. Pittsburgh.
Research Assistant. June 2017 - July 2017.
School of Computer Science. Robotics.

City University of Hong Kong. Hong Kong.
Senior Research Assistant. January 2017 - May 2017.
Department of Electrical Engineering.

ETH Zürich (ETHZ). Zürich.
Graduate Research Assistant. April 2015 - September 2016.
Laboratory of Computer Vision.

City University of Hong Kong. Hong Kong.
    Research Associate. July 2015 - August 2015.
    Department of Computer Science.

Carnegie Mellon. Pittsburgh.
    Research Associate I. June 2014 - August 2014.
    School of Computer Science. Robotics.

EDUCATION

ETH Zürich (ETHZ). Zürich.

Doctor of Science. April 2015 - March 2017.
Laboratory of Computer Vision.
Advisor: L. van Gool.

Carnegie Mellon. Pittsburgh.

Master of Science. May 2014 - February 2015.
School of Computer Science. ML Department and Robotics.

Thesis: A Library for Fast Kernel Expansions with Applications to Computer Vision and Deep Learning.

Academic Distinctions:

- HKPFS 2014-2015
  Highly prestigious HK Fellowship to pursue PhD studies at HKUST during academic years 2015-2018. Department of Computer Science and Engineering. Declined.
- SINGA PhD Fellowship 2014.
  Highly prestigious international award to pursue PhD studies at NTU Singapore during academic years 2015-2019. School of Electrical and Electronic Engineering. Declined.

City University of Hong Kong. Hong Kong.

Master of Science. September 2013 - February 2015.
Department of Electrical Engineering.
GPA: 4.12 (0-4.3 scale).
Classification of Award: Distinction (ranked 1st in the program).

Academic Distinctions:

- Top Achiever 2015.
  Award for being the first with regard to academic performance.
- MS Internship Sponsorship 2014.
  Award for top performing students. Robotics. Carnegie Mellon. Pittsburgh.
- MS Entrance Scholarship 2013/2014.
  Award given to the three most excellent students.

Universitat Autònoma de Barcelona. Cerdanyola del Vallès (Barcelona).

5-year Degree in Engineering of Telecommunication, Second Cycle. 2011 - 2013. Specialization in Communications, Signal Processing and Microwave Engineering. School of Engineering.

Thesis: Construction and Performance of Network Codes.
Grade: Excellent. First Class with Distinction.

Universitat Politècnica de Catalunya (UPC). Barcelona.

5-year Degree in Engineering of Telecommunication, First Cycle. 2006 - 2009.

University Entrance Examination.
Average Grade: 9.22/10. First Class with Distinction.

Academic Distinctions:

- First year scholarship for university studies. Ministry of Education.
  This award is given to the top nationwide first year university students.

- First year scholarship for university studies. Caixa Manresa.
  This award is given to the top university entrance examination average grades in the region of Catalunya.

- University scholarship for an outstanding academic performance. Technological Baccalaureate. Government of Salou. This award is given to the top students in each graduation year by the local authority.

Technological Baccalaureate. 2004 - 2006.
Average Grade: 9.7/10. First Class Degree and Honorary Scholarship.

Academic Distinctions:

- Outstanding Thesis of Research. Development and Design of a Virtual Shop in Visual Basic on the .NET Framework.

- Outstanding Curriculum.

PUBLICATIONS

De Curtó i DíAz and Duvall.
Vulcan Centaur: towards end-to-end real-time perception in lunar rovers.
arxiv.org/pdf/2011.15104

De Curtó i DíAz and Duvall.
Cycle-consistent Generative Adversarial Networks for Neural Style Transfer using data from Chang'E-4.
arxiv.org/pdf/2011.11627

Curtó, Zarza, Kitani, King and Lyu.
Doctor of Crosswise: Reducing Over-parametrization in Neural Networks.
decurto.tw/c/doctor_of_crosswise.pdf

Curtó, Zarza, Torre, King and Lyu.
High-resolution Deep Convolutional Generative Adversarial Networks.
decurto.tw/c/hdcgan.pdf

Curtó, Zarza, Smola and Gool.
Segmentation of Objects by Hashing.
decurto.tw/c/c_and_z.pdf

Curtó, Zarza, Yang, Smola, Torre, Ngo and Gool.
McKernel: A Library for Approximate Kernel Expansions in Log-linear Time.
decurto.tw/c/mckernel.pdf

De Curtó i DíAz, De Zarza i Cubero and Vázquez.
Secure Network Coding: Overview and State-of-the-art.
Universitat Autònoma de Barcelona. Cerdanyola del Vallès (Barcelona). 2012.
blogs.uab.cat/curto/files/2019/05/nc_decurto12.pdf

De Curtó i DíAz, Moreno, Torrellas, Bofill and Muñoz.
Dear New Student: a Comparison between a Frontal and an Active Approach.
ALE 2007. Toulouse.

DISSERTATIONS

Master of Science.
A Library for Fast Kernel Expansions with Applications to Computer Vision and
Deep Learning.
Supervisors: Ngo and Smola.
Carnegie Mellon. Pittsburgh. 2014.
curto.hk/c/decurto.pdf
curto.hk/c/slides_decurto.pdf

5-year Degree in Engineering of Telecommunication.
Construction and Performance of Network Codes.
Supervisor: Vázquez.
Universitat Autònoma de Barcelona. Cerdanyola del Vallès (Barcelona). 2013.
blogs.uab.cat/curto/files/2019/05/pfc_decurto.pdf
blogs.uab.cat/curto/files/2019/05/slides_pfc_decurto.pdf

LANGUAGES

English -

TOEFL Internet Based test. 26-11-2016. **Score 114/120.**

First Certificate in English. December 2005. **Grade: A.**

WORK
EXPERIENCE

CELLS ALBA Synchrotron Facility. Cerdanyola del Vallès (Barcelona).
Research Scientist. April 2010 - June 2010.

CELLS ALBA Synchrotron Facility. Cerdanyola del Vallès (Barcelona).
Internship. January 2010 - February 2010.

Universitat Politècnica de Catalunya (UPC). Barcelona.
Teaching Assistant. Departament de Teoria del Senyal i Comunicacions. September
2009 - December 2009.

CELLS ALBA Synchrotron Facility. Cerdanyola del Vallès (Barcelona).
Internship. July 2009 - September 2009.

Universitat Politècnica de Catalunya (UPC). Barcelona.
Teaching Assistant. Departament d'Arquitectura de Computadors. 2008 - 2009.

Universitat Politècnica de Catalunya (UPC). Barcelona.
Teaching Assistant. Departament d'Arquitectura de Computadors. 2006 - 2007.

SERVICES

CoRL. Virtual Conference. Formerly in Cambridge. 16/11 - 18/11. 2020.

Attendee.

ROS World. Virtual Conference. 12/11. 2020.

Attendee.

ICML 2020. Virtual Conference. Formerly in Vienna. 12/07 - 18/07. 2020.

Attendee.

Robotics: Science and Systems. Virtual Conference. Formerly in Corvallis. 12/07 - 16/07. 2020.

Attendee.

SIAM Conference on Imaging Science. Virtual Conference. Formerly in Toronto. 06/07 - 17/07. 2020.

Attendee.

IEEE International Symposium on Information Theory. Virtual Symposium. Formerly in Los Angeles. 21/06 - 26/06. 2020.

Attendee.

IEEE Conference on Computer Vision and Pattern Recognition. Virtual Conference. Formerly in Seattle. 14/06 - 19/06. 2020.

Attendee.

IEEE International Conference on Communications. Virtual Conference. Formerly in Dublin. 07/06 - 11/06. 2020.

Attendee.

IEEE International Conference on Robotics and Automation. Virtual Conference. Formerly in Paris. 31/05 - 04/06. 2020.

Attendee.

SIAM Conference on Mathematics of Data Science. Virtual Conference. Formerly in Cincinnati. 04/05 - 30/06. 2020.

Attendee.

IEEE International Conference on Acoustics, Speech, and Signal Processing. Virtual Conference. Formerly in Barcelona. 04/05 - 08/05. 2020.

Attendee.

ICLR 2020. Virtual Conference. Formerly in Addis Ababa. 26/04 - 01/05. 2020.

Attendee.

Oral presentation at the Social Virtual Event on Open source tools and practices in state-of-the-art DL research.

Slides with Q&A annotations: www.decurto.tw/c/iclr2020_DeCurto.pdf

First European Training School in Network Coding: Random Network Coding and Designs over $GF(q)$. IEEE Information Theory Society. Universitat Autònoma de Barcelona. Cerdanyola del Vallès (Barcelona). 04/02 - 08/02. 2013.

From designs over $GF(q)$ to applications of networking: a cross-road for mathematics, computer science and engineering.

Attendee and Volunteer.

ESOF 2008. Barcelona. 18/07 - 22/07. 2008.

Scientific Volunteer.

EXTRACURRICULAR
ACTIVITIES

Program of Open Mentoring. Department of Computer Science. The University of Hong Kong. 2014 - 2018.

MS Class Representative, cohort 2013. Department of Electrical Engineering. City University of Hong Kong. 2013 - 2014.

Course in Investment and Financial Markets. Technical Analysis and Risk Management. Barcelona. 23 May 2011 - 26 May 2011.

Course in Investment and Financial Markets. Barcelona. 18 April 2011 - 21 April 2011.

Competition of Entrepreneurship. EMPRÈN UPC. 1st Edition. Universitat Politècnica de Catalunya (UPC). Finalist project awarded with honorable mention and 1000 euros. Barcelona. 14 March 2011 - 14 June 2011.

PROGRAMMING

C, C++, Java, MATLAB, Python, HTML, VHDL and Assembly.

SOFTWARE

LATEX, Maple, PSpice and ADS.