Irene de Zarza

GENERAL
INFORMATION

Legal Name: DE ZARZA I CUBERO Irene.
E-mail: z@dezarza.ch

CAREER

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.
Department of Information Technology and Electrical Engineering.
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 (withdraw, post-candidacy).
Department of Information Technology and Electrical Engineering.
Laboratory of Computer Vision.

City University of Hong Kong. Hong Kong.

MS Multimedia Information Technology. September 2013 - February 2015.
Department of Electrical Engineering.
GPA: 3.86 (0-4.3 scale).
Classification of Award: Distinction.

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

Academic Distinctions:

- MS Internship Sponsorship 2014.
  Award for top performing students. Robotics. Carnegie Mellon. Pittsburgh.

Carnegie Mellon. Pittsburgh.

Visiting Student. September 2014 - February 2015.
School of Computer Science. ML Department.

Carnegie Mellon. Pittsburgh.

Visiting Student. May 2014 - August 2014.
School of Computer Science. Robotics.

Universitat Autònoma de Barcelona (UAB). Barcelona.

Mathematics. 2011 - 2013.
Minor in Pure Mathematics.
Faculty of Sciences.

Thesis: Physical-layer Network Coding: Design of Constellations over Rings.
Grade: Excellent. First Class with Distinction.

Universitat de Barcelona (UB). Barcelona.

Mathematics, Licentiate. First Cycle. 2007 - 2011.
Department of Mathematics and Computer Science.

University Entrance Examination.
Average Grade: 8.93/10. 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.

Technological Baccalaureate. 2005 - 2007.
Average Grade: 10/10. First Class Degree and Honorary Scholarship.

Academic Distinctions:

- Outstanding Thesis of Research: Squaring the Circle. Study of the different mathematical approaches to solve the ancient problem of the quadrature of the circle.

- Outstanding Curriculum.

Publications

Curtó, **Zarza**, Kitani, King and Lyu.
Doctor of Crosswise: Reducing Over-parametrization in Neural Networks.
http://arxiv.org/pdf/1905.10324

Curtó, **Zarza**, Torre, King and Lyu.
High-resolution Deep Convolutional Generative Adversarial Networks.
http://arxiv.org/pdf/1711.06491

Curtó, **Zarza**, Smola and Gool.
Segmentation of Objects by Hashing.
http://arxiv.org/pdf/1702.08160

Curtó, **Zarza**, Yang, Smola, Torre, Ngo and Gool.
McKernel: A Library for Approximate Kernel Expansions in Log-linear Time.
http://arxiv.org/pdf/1702.08159

Dissertations

MS Thesis. Multimedia Information Technology.
A Library for Fast Kernel Expansions with Applications to Computer Vision and Deep Learning.
Supervisors: Ngo and Smola.
Carnegie Mellon. Pittsburgh. 2014.
http://zarza.hk/zarza.pdf
http://zarza.hk/slides_zarza.pdf

Mathematics.
Physical-layer Network Coding: Design of Constellations over Rings.
Supervisors: Vázquez and Mondelo.
Universitat Autònoma de Barcelona. Bellaterra. 2013.
http://blogs.uab.cat/zarza/files/2019/05/pfc_zarza.pdf
http://blogs.uab.cat/zarza/files/2019/05/slides_pfc_zarza.pdf

Work Experience

Institut d'Educació Secundària Joan Coromines. Barcelona.
Teaching Assistant. 2005 - 2006.

Languages

English -

TOEFL Internet Based test. 11-12-2016. **Score 102/120**.

Services

First European Training School in Network Coding: Random Network Coding and Designs over $GF(q)$. Universitat Autònoma de Barcelona (UAB). Barcelona. 4 - 8 February 2013.

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

Attendee and Volunteer.

EXTRACURRICULAR
ACTIVITIES

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

Symposium of the Royal Society of Mathematics, The Millennium Problems. Awarded with an assistance grant by Institut de Matemàtica de la Universitat de Barcelona (UB). Barcelona. 1 - 3 June 2011.

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

Course in Investment and Financial Markets. Barcelona. 18 - 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, Python, MATLAB and Prolog.

SOFTWARE

LaTeX, R, Maple, Mathematica and EViews.