Cecilia Ferrando

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EDUCATION

MSc, Computational Design, Fulbright Scholar — August 2016 - Present
Carnegie Mellon University, Pittsburgh, USA
Relevant coursework: Parametric Modeling, Design Research, Advanced CAD/CAE
Python programming, Machine Learning, Deep Learning

MSc, Architectural Engineering — 2013 - 2015
Polytechnic University of Turin, Italy
Final Grade: 110/110 Summa Cum Laude
Study exchange: ENSA Paris-Belleville, Paris, France, 2014-2015

Honors MA, Economics and Statistics — 2009 - 2016
Collegio Carlo Alberto, Italy
Dissertation: *Bayesian Hierarchical Blockmodels for Social Network Analysis*

Honors MSc, Innovation and Technology — 2013 - 2015
Alta Scuola Politecnica, Polytechnic University of Turin and Milan, Italy
Final project: *A multicriteria analytic tool to assess reuse scenarios of Valle d'Aosta historic castles*

BSc, Architecture — 2010 - 2013
Polytechnic University of Turin, Italy
Final grade: 110/110 Summa Cum Laude

WORK EXPERIENCE

Procore Technologies, Santa Barbara, CA — May 2017 - August 2017
Quantitative UX Research Intern
Data processing, statistical analysis of user data, recommender systems, computational image processing (iPython, numpy, scipy, openCV)

Carnegie Mellon University, Pittsburgh, PA — May 2017 - October 2017
Research Assistant, Computational Design
Research and curatorial assistantship for the exhibition "Designing the Computational Image", Miller Gallery, 2017
Supervisor: Daniel Cardoso Llach, PhD

SELECTED PROJECTS

A new metric for the evaluation of spatial quality from architectural floor plans — 2017-2018
Master's Thesis in Computational Design

A CNN approach to image segmentation of architectural drawings — Fall 2017
Final project (team) in 10-707 Deep Learning. Instructor: Russ Salakhutdinov

HP-Intel NASA Design Challenge "Life in Space" — Spring 2017
A self-sustained, purely mechanical exoskeleton to help astronauts fight muscle atrophy in space. The team won the first prize. CMU supervisor: Diane Turnshek

The Harmonograph — Fall 2016
A python program simulating the motion of a double-pendulum drawing machine.
Final project in 15-112 Fundamentals of Computer Science and Programming.
Instructor: David Kosbie
Second prize over more than 400 projects in a competition sponsored by Applied Predictive Technologies.

Solar Decathlon Europe 2014 — 2013
Project Architect for the official Polytechnic University of Turin team

TECHNICAL SKILLS

AutoCAD, Revit, 3DSMax, Inventor, Adobe Creative Suite,
Python (iPython, Numpy, TensorFlow), Matlab, LaTex

AWARDS and SCHOLARSHIPS

Fulbright Scholarship U.S. Department of State — 2016 - 2017
Merit Scholarship, Collegio Carlo Alberto — 2009 - 2016
Merit Scholarship, Alta Scuola Politecnica — 2013 - 2015
Erasmus+, European Union — 2014 - 2015
Merit Award for Excellence in High School, MIUR — 2009
Awards in several Mathematics competitions, Liceo Classico "V. Gioberti" — 2004-2009

LANGUAGES

Italian, mothertongue
English, advanced
French, advanced