# Juan Sidrach de Cardona Mora

Resume

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### Education

- 2015 2017 M.S. in Computational Science, Mathematics and Engineering University of California, San Diego GPA: 4.0/4.0. Professional focus: Software Engineering
- 2010 2015 **Double Degree in Computer Science and Mathematics** *Universidad Autónoma de Madrid* Combined GPA: 8.4/10, Computer Science GPA: 9.1/10 (top 5%)

### Experience

- Sept. 2015 Teaching Assistant University of California, San Diego. Department of Mathematics
  - Present O Holding discussion sections, tutoring students and grading exams for undergraduate mathematics courses
    - o Currently assisting in Calculus for Science and Engineering III
- July 2015 Web Developer Innovación en Sistemas de Monitorización
- Sept. 2015 Proposed and incorporated some software tools to the work flow, speeding up the software development process
  - Designed and implemented a module for the visualization of photovoltaic and self-consumption facilities for emoncms, a powerful open source web-app to process and visualize environmental data
  - o Developed a semi-automatic system to create users with predefined features for emoncms
- Sept. 2014 Software Developer Intern High Performance Computing and Networking
- June 2015 O Contributed to the implementation of an API to federate a testbed into the European project Fed4FIRE
  - Designed and implemented a REST service and a web UI to manage high performance network FPGA traffic capturers, as part of the degree thesis
- June 2014 Banking Analytics Intern Knowledge Engineering Institute
- Sept. 2014 O Developed software tools, including a redmine plugin and bash scripts to help automate database migrations

# Projects

- July 2015 **EWatcher** module for the emoncms platform to visualize PV self-consumption facilities
- Sept. 2015 O Currently being used at two solar energy cooperatives in Southern Spain
  - o Visually displays real time data, and enables a quick detection of any possible issue with the electricity generation
  - o Libraries and languages used: Flot, jQuery, Bootstrap, PHP, HTML, CSS, JavaScript
- July 2015 Jekyll About-me personal portfolio theme for jekyll
  - Compatible with GitHub Pages for easy deployment and hosting
  - o Libraries and languages used: jekyll, Liquid, Bootstrap, jQuery, HTML, JavaScript, CSS
- Sept. 2014 **NetWatcher** web-based app to manage FPGA network probes
  - June 2015 O Allows non-expert users to test their apps over previously captured network traffic at 10 Gbps
    - o Structured as a REST-like service back-end on the FPGA host and a webpage front-end
    - o Improves the overall system security as a result
    - o Libraries and languages used: node.js, Bootstrap, jQuery, PHP, HTML, JavaScript, CSS, bash

#### Other courses

Summer 2015 Data Visualization - University of Illinois at Urbana-Champaign (Coursera)

### Skills

- Competences Software Engineering, Imperative programming, OOP, Code refactoring, Performance optimization
- Prog. Langs. C, JavaScript, PHP, SQL, HTML, CSS, C#, Java
  - Software git, jQuery, node.js, express.js

## Languages

Spanish Native

English Professional working proficiency

o TOEFL iBT - 108/120 (2015)

Cambridge English: Advance (2014)