

# 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
  - Holding discussion sections, tutoring students and grading exams for undergraduate mathematics courses
  - 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
  - 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
  - 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
  - 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
  - Currently being used at two solar energy cooperatives in Southern Spain
  - Visually displays real time data, and enables a quick detection of any possible issue with the electricity generation
  - 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
  - Libraries and languages used: jekyll, Liquid, Bootstrap, jQuery, HTML, JavaScript, CSS
- Sept. 2014 - **NetWatcher** - *web-based app to manage FPGA network probes*
- June 2015
  - Allows non-expert users to test their apps over previously captured network traffic at 10 Gbps
  - Structured as a REST-like service back-end on the FPGA host and a webpage front-end
  - Improves the overall system security
  - 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
  - TOEFL iBT - 108/120 (2015)
  - Cambridge English: Advance (2014)