

# Alberto Sadde

(UK) +44 7429 503 701 | [albertosadde@gmail.com](mailto:albertosadde@gmail.com) | [GitHub](#) | [Blog](#) | [StackOverflow](#)

---

## Education

### University of Oxford

#### MSc in Computer Science | Oxford, U.K. | *Distinction*

2015 - 2016

Thesis: "[Consolidation of Haskell Programs: Semantic Fusion of maps, filters and folds](#)"

- Supervised by Marcelo Sousa and Daniel Kroening.
- Developed a novel optimization technique that leverages semantic information between programs and expressions and is able to produce speedups of up to 2x in a variety of Haskell programs.
- During the experimental phase of the project I also developed an engine to gather statistics about the Haskell ecosystem. The project is now [open source](#).

### University of York

#### BSc in Mathematics and Computer Science | York, U.K. | *First Class Honours*

2011 - 2015

Final year project: "Functional GPU Programming: A comparison between Obsidian and Accelerate".

- Supervised by Colin Runciman.
- Performed an empirical study of two domain specific languages, Obsidian and Accelerate, that produce optimized CUDA code from Haskell code.
- Presented the project at the 2015 International Conference on Functional Programming. A video of my talk is available [online](#).

### Universidad Simón Bolívar

#### BEng in Computer Engineering | Caracas, Venezuela

2009 - 2011

Studied for two years before transferring to the University of York. Overall mark 4/5 (top 10% of the class).

---

## Experience

### Department of Computer Science, University of Oxford

October - November 2016

Teaching assistant and demonstrator for the Functional Programming course (Haskell) taught to both graduates and undergraduates.

### Integrated Modelling Technologies, Computational Engineering

#### Advanced Technology Centre (ATC), BAE Systems

#### Research Scientist | Filton, U.K.

2013 - 2014

BAE Systems is a renewed worldwide technology firm. The ATC is its main R&D department, responsible for the development of new technologies used both internally and externally by a wide range of products and capabilities.

- Developed a real-time visualization engine for an in-house multi-objective genetic algorithm.
- Lead the refactoring and optimization of this multi-objective genetic algorithm developed for GPUs using CUDA and C++.

### Laboratorio Docente de Computación (LDC), Universidad Simón Bolívar

#### Network and Systems Administrator | Caracas, Venezuela

2009 - 2011

LDC is the main IT lab of the University. It manages everything from students and staff email to the maintenance of the intranet and on-site hardware.

- I was part of a team of students in charge of the University's networks and data centers.
  - Leader of the mail and backups groups. This involved making sure that all the servers were up and running, dealing with clients, and delegating tasks to other members of the groups.
  - Developed a script to automatically turn on 200+ computers using wake-on-LAN packets.
  - Taught an introductory Linux course, freely available to all members of the University.
- 

## Honors and Awards

- **Bronze Medal, 2015 ACM Student Research Competition**  
International Conference on Functional Programming (ICFP), Vancouver, BC.
  - **2014 BAE Systems Bronze Chairman's award for innovation**  
For my work on the multi-objective algorithm and its visualization interface.
- 

## Skills and Interests

**Languages:** Spanish (native speaker), Italian (native speaker), English (full professional proficiency).

### Programming Languages

- Proficient in Haskell, C++, Java.
- Basic knowledge of Python, Scheme, PHP, JavaScript, Swift, VimScript, Lua, Scala.

**Interests:** Underwater Rugby, Swimming, Hiking, Rowing.