

## EMPLOYMENT

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**Software Engineer Intern** **Improbable** **Summer 2017**

- Performed research and wrote design guides about the challenges that distributed systems bring to player movement, state machines, AI, artificial ecosystems, and organically stable ecosystems.
- Nurtured the company's culture by proactively organizing internal "Learn" events such as a company-wide game jam, giving a talk about programatic/urban art to the design team, and introducing coworkers to VR.
- Engaged with the community through Twitter and forums. Referred to as that "amazing intern that solved our problems".

**Organiser and Lead Designer** **Hackers@UPC** **Spring 2015 - Present**

- Kickstarted our regular HackNight, a weekly event to work on projects and learn together.
- Designed the brand, logos, website, and swag for KairosHacks, HackUPC 2016S, and HackUPC 2016F.

**Front-end Engineer** **Toggl** **March 2015 - March 2016**

- Introduced and promoted ChatOps. Automated several recurring tasks via git hooks and Hubot commands.
- Stopped A/B test development from being highly error-prone by building a developer-friendly library that works around requirement mismatches detected in proactive research.
- Improved developer experience by centralizing our knowledge base, adding linters, and performing thorough code reviews. "I learned more in a week than in 7 months at my last job, and it was mostly because of your reviews".
- Participated in the design and coding of the Notifications overhaul. Fixed multiple XSS vulnerabilities.

**Course Teacher and Former President** **VGAFIB** **June 2013, Jan 2014, July 2015**

- Recurrent course about "Multiplayer Online Games using Node.js" at UPC BarcelonaTech.
- Taught lessons covering: JS ES6, Node.js, CI, CD, game development, P2P vs centralized, (non)authoritative server, lock-stepping, simulation with redos, dead-reckoning, agreed input delay, clock syncing.

## PROJECTS AND OPEN SOURCE

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- [#art+#code](#) - series of experiments where art is generated using code.
  - [AG-Drift](#) - multiplayer online racing game for the browser. Minimized network usage by running deterministic simulations that only need to receive all players' input events in order to get synced.
  - [LudumPad](#) - Open Source library for using mobile devices as external game controllers.
  - [Mocha \(Core Member\)](#) - Most popular JS test framework, with over 100,000 dependent public projects. 5M monthly downloads. I've reviewed ~130 PRs. Together with the core team I make decisions about Mocha's future.
  - [Kipos](#) - Unfinished iOS game with no marketing but over 80k downloads and a 4.5/5 rating average.
  - [1st Prize, PennApps 2015 \(~1400 participants\): LifeSaber](#) - Product Design for watch app that guides users through correct CPR, automatically calls 9-1-1, and instructs nearby app users to bring defibrillators.
  - I have published 152 open source repositories on [GitHub](#) and 27 packages on [npm](#).

## EDUCATION

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**Barcelona, Spain** **Open University of Catalonia** **Spring 2016 - Summer 2018**

- Undergraduate Coursework: Artificial Intelligence, "Automata, Grammars, and Languages", Compilers, Cryptography, Database Architecture, Distributed Systems.

**Barcelona, Spain** **Polytechnic University of Barcelona** **Fall 2012 - Summer 2014**

- Undergraduate Coursework: Physics; Databases; Computer Interfacing; Data Structures and Algorithms; Probability and Statistics; Operating Systems; Interaction and Interface Design.