

WORK EXPERIENCE

IThinkUPC, Full-Stack Developer

Feb. 2018 – Present

Intern

Barcelona, Spain

- Developed a dynamic web app with **Java** using **Agile** methodology and **MVC** for CaixaBank (one of Spain's major banks). Used **Spring** Framework with tools such as **Lombok**, **Maven**, **Thymeleaf** and **Hibernate**.
- Learned and worked with **HTML/CSS/JS/jQuery** for the frontend and **SQL** for the database

Polytechnic University of Catalonia

May 2018 – Aug. 2018

Intern

Barcelona, Spain

- Maintenance and updating of the University's Website (using **Plone**)
- Developed **Python** scripts to automate recurring and routine tasks

Joan Coromines Institute

Feb. 2018 – Jun. 2018

Tutor

Barcelona, Spain

- Worked with high school students in subjects including Maths, Physics and Informatics

EDUCATION

Uppsala University

Sept. 2018 – Feb. 2019

Bachelor of Science, Computer Science

Uppsala, Sweden

- Erasmus+ Mobility

Polytechnic University of Catalonia, School of Informatics

Sept. 2015 – Jul. 2019

Bachelor of Science, Computer Science

Barcelona, Spain

- Specialized in Computing

SKILLS & INTERESTS

- **Main programming languages:** C++, C, Java, Python, Fortran, C#
- **Other:** MATLAB, Awk, Haskell, LaTeX, Assembly (x86), Bash, SQL, Prolog, R, HTML, CSS, JavaScript
- **Tools:** Version control (Git), Maven, OpenMP, OpenStack, OpenGL, Linux, Windows
- **Experience in:** Computer Assisted Image Analysis, Agile Methodologies, Software Testing, Astronomy, Artificial Intelligence, Game Development, Cloud Computing.
- **Languages:** English (CEFR C1), Spanish (Native), Catalan (Native)
- **Interests:** Playing the guitar, running, reading, hiking, photography and a lot of computer-related stuff!

PROJECTS

- **Detection of stellar flares using GNSS data:** <https://github.com/mbdavid2/TFG-GNSS-Stellar-Flares>
(*In progress - July 2019*) BSc Thesis. Algorithms for the detection of flares from the Sun and far-away stars.
- **ANTLR4 Compiler:** <https://github.com/mbdavid2/antlr4-compiler>
Grammar recognition of a simple language as well as Type Check and Code Generation systems.
- **Car AI using Genetic Algorithms in Unity:** <https://github.com/mbdavid2/CarsGeneticAI>
Cars find the best behavior/parameters to drive in a given track, improving each generation.
- **hunctionGO (Junction 2018):** <https://github.com/mbdavid2/hunction>
AR creature hunting game to entertain young super market customers using Unity and Cisco Meraki.
- **Contextualization of QTL as a service [Python]:** <https://github.com/mbdavid2/cloudproject>
Cloud Contextualization and Orchestration using OpenStack of QTL: a cloud service for genetic analysis.