

# Belen Barbed

belen.barbed.com  
belenbarbed@gmail.com | +44 (0) 7576 474007

**PROFESSIONAL OBJECTIVE:** To build a career in intelligent systems design and development.

## EXPERIENCE

### AMAZON VIDEO | SOFTWARE DEVELOPMENT ENGINEERING INTERN

April 2018 – Sept 2018 | London, UK

- Undertook 6-month placement in the Front-End team for the Prime Video sign-up experience.
- Worked with React and NodeJS for widget generation, while also designing Back-End services in Java and Perl.
- Developed integrated pop-up widget to help potential customers throughout the sign-up process.

### PROJECT DROTUM | AUTOMATED SYSTEMS INTERN

July 2017 – Sept 2017 | Leon, Spain

- Start-up supported by AUVSI (Association for Unmanned Vehicle Systems International) which develops Autonomous Systems for unmanned vehicles with the objective of fully automating Spain's transport system by 2040.
- Worked with Machine Learning, Neural Networks and Computer Vision, parallelisation with GPUs and utilising a range of camera and sensor inputs. Developed a real-time lane detector and follower (shown here at time 0:26) and a 2D scanning and mapping lidar.

### FIRETECH CAMP | ROBOTICS AND ARDUINO TUTOR

Feb 2016 – Feb 2017 | London, UK

- Teacher of computing and robotics to young girls at a London school, also assisting with curriculum design.
- Summer teacher of Arduino robotics and programming to class groups of 12-15 year-old teenagers.

## EDUCATION

### IMPERIAL COLLEGE LONDON | MENG IN ELECTRONIC AND INFORMATION ENGINEERING

Sept 2015 – Expected June 2019 | London, UK

- Undertaking fourth year towards MEng. Achieved a 2.1 in all three years thus far.
- President of the Imperial College Robotics Society, a student-led organization with 350+ members (further details below).
- Undergraduate Teaching Assistant (UTA), guiding second year students through Digital Electronics Design laboratory work.

### BRITISH COUNCIL SCHOOL | HIGH SCHOOL EDUCATION, SPANISH BACCALAUREATE

Sept 2011 – June 2015 | Madrid, Spain

- Average of 9.6 out of 10 in the Spanish Baccalaureate and 12.262 out of 14 in the official University Entry Exam.
- Consistently top of the year in Physics and Economics. Award for Excellent Results received every year.

## EXTRACURRICULAR ACTIVITIES

### IMPERIAL COLLEGE ROBOTICS SOCIETY (ICRS) | PRESIDENT

Sept 2017 – Present | London, UK

- Leadership over an 11-person committee in managing the Society, from searching for sponsors and investing in lab infrastructure, to developing robotics courses, hackathons (FoodHack 2017) and group projects (more at icrs.io).
- Concurrently pursued personal technical projects such as a self-localising mobile robot, a laser-operated musical instrument, an automated blinds operator and LED-adorned headwear.

### HACKATHONS

Jan 2016 – Present | Around the World

- HackMIT 2016: Held at MIT, received grant to attend. Developed the web interface for an online EPOS checkout system.
- HackScience 2016: Themed around automating time-consuming processes in lab experiments. Designed and programmed the control system for a portable vacuum oven.

## SKILLS

### PROGRAMMING

C/C++ • Python • JavaScript • NodeJS with React • Shell • Java • SQL • MATLAB • Arduino • MIPS • HTML/CSS • Verilog • Perl • Flex • GNU Bison

### HARDWARE

Electronic Circuit Design and Implementation • Soldering • Laser Cutting • PCB Design • 3D Printing

### NATURAL LANGUAGES

Native fluency: English, Spanish

Intermediate fluency: French

### OTHER INTERESTS

Tennis: Member of the College tennis team playing in inter-university competitions.

Travelling: 23 countries visited in 4 continents.