# Louise Poubel

Cosmopolitan roboticist with a passion for open source and developer experience.

### Software Software

Gazebo / Ignition core dev
ROS (1 and 2) collaborator
Linux, Mercurial, Vim, Git, heavy user
CMake, Docker, tmux
Office, Inkscape, GIMP, casual user
OpenSCAD, KDEnlive, LaTex

### Programming

C++ heavy user
JavaScript, CMake, Ruby, casual user
Bash
TypeScript, Angular, Polymer, familiar
C, Python

## Education

# Masters of Automation and Production Systems

Nantes, France 2012 - 2013

MEng on Robotics and Control

Warsaw, Poland 2011 - 2012
 BS on Electromechanical Engineering
 Chiba, Japan 2007 - 2011

## Achievements

#### Robohub

25 women in robotics you need to know about – 2015

#### Outreachy Scholarship

GNOME stipend to work on Open Source for 3 months.

#### © Erasmus Mundus Scholarship

Masters studies in Europe and life expenses fully covered for 2 years.

#### **MEXT Scholarship**

Undergrad studies in Japan and life expenses fully covered for 5 years.

## Languages

Portuguese native
English fluent
Japanese advanced
Spanish advanced
⊕ French intermediate
→ Polish basic

## Experience

#### **Open Robotics**

USA Senior Software Engineer 2015 - present

- Lead technical development of the Ignition framework's entity component system core, <u>Ignition Gazebo</u> and GUI library, <u>Ignition GUI</u>. Using C++17, QtQuick, QML, material design.
- <u>Gazebo</u> simulator's core development in C++11. Involved in all aspects, including physics, rendering and transport, with a focus on GUI. Using libraries like Qt, Protobuf, Ogre3D, ODE.
- Refactoring of Gazebo wrappers, gazebo\_ros\_pkgs, for ROS 2.
- Development of competition environments and game mechanics, such as <u>NASA's</u>
   <u>Space Robotics Challenge</u> and <u>ServiceSim</u>, the <u>Service Robot Simulator</u>. Using
   ROS, eRuby,
- Development of <u>Igniton Fuel</u>, a platform hosting simulation assets online. Involved in the Angular 4+ web UI, as well as the C++ library and command line tool.
- Development of <u>CloudSim</u>, a platform for running simulations on the cloud. Involved in full stack, from usability and front-end in Polymer to back-end in NodeJS and integration with AWS services.
- Interaction with open source community through <u>forums</u>, issue trackers and social networks.
- Mentored remote interns through Google Summer of Code and Outreachy.

#### **Open Source Robotics Foundation**

Remote Intern / Contractor 2013 - 2014

• Developed the mobile version of Gazebo's web client, <u>GzWeb</u>, using Three.js, AngularJS and jQuery. Conducted usability tests and developed features for both desktop and mobile versions,.

## Selected publications

Open Source Robotics: Getting Started with Gazebo and ROS 2

InfoQ, 2019

The Robotics Revolution is Open Source

Scientific Computing, 2016

Support Changes during Online Human Motion Imitation by a Humanoid Robot using Task Specification

IEEE International Conference on Robotics and Automation, ICRA 2014

## Selected presentations

From Robot Simulation to the Real World

QCon.ai 2019

Open Source Robotics: Hands on with Gazebo and ROS 2

QConSF 2018

Space Robotics Challenge backstage: A glimpse at the challenges of running the

competition ROSCon 2017

Making room under Gazebo: accommodating newcomers and power users alike

**OSCON 2017** 

What's new in Gazebo? Upgrading your simulation user experience!

ROSCon 2016

C++ in Open Source Robotics

CppCon 2015