# Clement Jambou

+1 505 557 7745 (USA) clem.jambou@gmail.com

# Work and Research Experience

#### CEO and Co-founder at Unsupervised.ai

San Francisco/Shenzhen/Paris 2016-2020

Building Robots for Warehouses and Factories

- Team Hired and managed a team of up to 8 engineers, technicians and designer between SanFrancisco, Shenzhen and Paris.
- Self-driving stack Built a self-driving stack for Mobile autonomous robots, including SLAM, AMCL, and behavioral planning. Leveraged multiple state of the art tools including ROS, Python (Flask, Pandas, Numpy), React, Mongo Db/Dynamo Db.
- **Production**: Built a product from scratch including prototyping (Mechanical, Electrical and Software) to 30-unit batch production and assembly.

# Senior Data Scientist at Lyft

San Francisco

Marketplace Growth team, helped grow the team from 4 to more than 20 Data Scientists. Mapping/Self Driving team.

- Simulation Build Simulation tool, used to guide business decision and optimize Marketplace algorithms, used by DS team daily.
- **Dispatch** Algorithm: prediction and decision for optimal use of available drivers
- Dynamic Pricing: real time price multiplier that account for demand prediction and available supply, to deliver optimal service.
- Lyft Line **Matching** Algorithm: Match the passengers that have a similar route together, optimization of the dispatch decision to maximize sustainable discount compared to a classic
- ETA prediction Build state of the art performing ETA prediction model using Deep Neural Network.
- SLAM / Mapping Build a scalable 3D mapping tool using Velodyne LIDAR and IMU/GPS.

#### Data Scientist Intern at Lyft

San Francisco

Summer 2013

- Modelization and Implementation of a positioning system to coach ride-sharing driver toward a better destination, using real-time demand and traffic estimation to minimize the time between two rides for a driver.
- Experience with **Python**, **MongoDB**, parallelization and production on **Heroku**

#### Imperial College London

Department of Computing 2013 - 2014

- Research Project in Machine Learning and Optimization: "Learning walking skills for modular Robots"
- Master's Thesis: Learning Music Representation using Recurrent Neural Networks and other Deep Learning Techniques (Summer 2014)

- ISAE-Supaero, Bachelor project Mathematics, Control and Computer Science Department

  June 2012
  - Design, programming and manufactoring of 4 devices for the 2012 Edition of the ASME
     Student Design Competition (American Society of Mechanical Engineers). The devices had to compete automatically an "Energy Relay" using differents energy sources for propulsion.

# **European Space Agency**

Noordwijk, Netherlands

- Intern at the European Space Research and Technology Center (ESTEC)

  July 2012

  Telerobotics and Haptics laboratory:
  - Design of the covers of the X-Arm 2.0 Exoskeleton for its future use on board of the International Space Station

### **Education**

•	Imperial College of London, Department of Computing  Master of Science in Advanced Computing	London, England 2013 - 2014
•	Institut Superieur de l'Aeronautique et de l'Espace Supaero Graduate Program	Toulouse, France 2011 - 2014
	- BS in 2012  - Major in Computer Science	2011 - 2014
•		Versailles, France
	Undergraduate Program in Mathematics, Physics and Computer Science for the	2009-2011

#### Awards & Honors

Speaker at PyData Paris
$1^{st}$ prize of the Student Design Robotics Competition of the ASME
$1^{st}$ European prize at the Old Guard Oral Presentation Competition
Junior Fermat Prize in Mathematics
$1^{st}$ Prize with the French team for the International Tournament of Young Mathematicians . 2010
$2^{nd}$ Prize of the academy of Versailles for Mathematics Olympiads

#### **Skills**

# Computer skills

 Languages: Python 2/3 (Pandas, Numpy, Theano, Tensorflow), C/C++ (OpenCv),
 Javascript(React + Graphql) Java, Caml,
 Delphi, XHTML/CSS, PHP/MySQL

competitive exams to the french "Grandes Ecoles" (top 7 %)

- Software: Latex, Photoshop, 3D-CAD with CATIA, Fusion360, Maple, Matlab
- **Teamwork**: Git (Github)

- **OS**: Linux, Unix, Windows

#### Languages

- French native language
- English proficient ( Toefl-IBT : 105/120)
- German proficient (Abitur Diploma)

#### **Interests**

- Music: Cello, Guitar
- Sports: Athletics (Marathon: 2h53), Soccer, Mountaineering, Climbing
- Campus Activities: President of the Micro-drones club and Member of the Robotics Club at ISAE and Member of the Robotics Club at ICL