## **CURRICULUM VITAE**

#### PERSONAL INFORMATION

First Name /Surname: **Domingo ESTEBAN** 

Address: C/ Juan Duque, 34, Bajo-A. 28005

Madrid - Spain

Mobile: +34 602 58 27 80

Email: domingoesteban@outlook.com

mingoesteban@gmail.com

Personal website: http://domingoesteban.com

Skype: domingoesteban Nationality: Peruvian and Spanish



### **SUMMARY**

Software engineer with a M.Sc. in Robotics and Automation, a B.Sc. in Industrial Engineering and a B.Sc. in Economics and Business.

Experience in design and development of software and its application in operational and management processes. Knowledge of modelling and simulation, artificial intelligence, machine learning, computer vision, task planning, motion planning, and kinematics/dynamics control in robots.

Knowledge and experience in: GNU/Linux, programming languages (C/C++, Python, Visual Basic and Java), version control systems, real-time operating systems, Matlab/Octave, Simulink, ROS and robotics simulation software (Gazebo, Webots, RobotStudio, Blender/Physics).

### **EDUCATION**

### • M.Sc. in Robotics and Automation

University: Universidad Carlos III de Madrid. Madrid-Spain Department: System Engineering and Automation Department

Period: 2012 – 2014

### B.Sc. in Industrial Engineering

University: Universidad Nacional de San Agustín – UNSA. Arequipa - Peru

Department: Industrial Engineering School

Period: 2004 – 2009

### B.Sc. in Economics and Business

University: Universidad Católica San Pablo – UCSP. Arequipa - Peru

Department: Business Administration Program

Period: 2006 – 2010

### **WORK EXPERIENCE**

# • IXION Industry and Aerospace (Madrid-Spain) Robotics and Automation Intern

06/2013 - Now

- O Design and development of computer programs in C, C++ and Python.
- O Design, programming and implementation of locomotion, perception, localization, SLAM and motion planning algorithms for the autonomous robots of the company: unmanned multi-rotors vehicles (UAS), unmanned ground vehicles (UGV) and autonomous underwater vehicles (AUV) in ROS.
- O Programming of navigation algorithms of autopilot system in real-time embedded systems.
- O Development and wrapping of sensor drivers in real-time embedded systems.
- O Datagram and stream sockets programming.
- O Development of shell scripts for UNIX and GNU-Linux Operating Systems.
- O Programming of navigation algorithms of autopilot system in real-time embedded systems.
- O Programming and implementation of Hardware-in-the-loop (HIL) simulation systems for the navigation of autonomous robots.
- 0 3D modeling of autonomous robots and indoor/outdoor environments.
- O Simulation of autonomous mobile robots.

## • Barrick Gold Corporation – Minera Barrick Misquichilca S.A. (Huaraz-Peru) Intern

01/2011 - 12/2011

- O Applications development with Visual Basic.
- O Data analysis and use of data mining techniques to obtain information from the databases of the company.
- O Employee personal data update and generation of reports in Oracle R12 System.
- O Training and advising during the implementation of the use of Plateau system for the training and development processes of the company.
- O Statistics, indicators and documentation update of the Human Resources Quality Management System according to ISO 9001 standard.
- O Technical training and measurement for operational areas.
- O Recruitment, selection, contract administration, job descriptions, training and development processes.

## Freeport-McMoRan Copper & Gold Inc. – Sociedad Minera Cerro Verde S.A. (Arequipa-Peru)

#### Intern

01/2010 - 06/2010

- O Development of database of contractors with C++ and SQL.
- O Development of applications in VBA for Microsoft Excel and Microsoft Access.
- O Development of statistics by area, contractors and projects.
- O Analysis of health and safety data information.
- O Review of incident investigation reports, monitoring of incident action plans and organization of the safety committee.
- O Participation in safety inspections, issuing reports and maintenance of tracking evidence.

### SPECIALIZED KNOWLEDGE

Applications software design and development, embedded software development, modelling and simulation of systems, autonomous vehicles navigation, robot planning, robot programming, robot control, machine learning.

### TECHNICAL SKILLS

- Applications
  - o MATLAB/Simulink
  - o ROS
  - o IDEs: Eclipse CDT, QtCreator, Keil, CodeBlocks, Vim and Sublime Text
  - O Version control systems (VCS): Git, Subversion and Mercurial
  - o OpenCV
- Programming languages
  - o C, C++
  - o Python
  - o MATLAB/Octave
  - o Shell Scripting
  - o RAPID
  - o Java
  - o Visual Basic
  - o HTML, CSS

### LANGUAGE SKILLS

- Spanish: Native language
- English: Centro de Idiomas de la Universidad Católica San Pablo
  - O Understanding: B2 Intermediate
  - o Speaking: B2 Intermediate
  - O Writing: B2 Intermediate
- French: Alliance Française d'Arequipa
  - O Understanding: B1 Intermediate
  - o Speaking: B1 Intermediate
  - O Writing: B1 Intermediate

### RECOGNITION

- Upper fifth of the 2008-2 Industrial Engineering graduating class Universidad Nacional de San Agustín. Arequipa-Peru
- Upper fifth of the 2010-2 Business Administration graduating class Universidad Católica San Pablo. Arequipa-Peru
- Third place in the Project contest Barrick Academy 2011 U.E.A. Pierina Barrick Gold Corporation Minera Barrick Misquichilca S.A.