# - ANTHONY ARÓSTEGUI -

## Industrial Engineer, Software Developer & Researcher

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#### **EDUCATION**

## **Bachelor of Science in Industrial Engineering**

2017

Universidad de Ingeniería y Tecnología (UTEC) - top fourth of the class

Lima, Perú

• Thesis Title: Assessment of awareness and engagement in advertising with Augmented Reality and Gamification elements

### RESEARCH EXPERIENCE AND PROJECTS

# Developer and Researcher

10/2020 - Present

Prllel

Lima, Perú

- Study: Analysis of neural network models applied in depth estimation. Working with NYUv2 Dataset.
- Implementation and assessment of neural networks techniques for planar detection using Pytorch.

#### Developer & Researcher

10/2020 - Present

Universidad Cayetano Heredia

Lima, Perú

- RespIoT Project: An IoT system for remote monitoring of vital signs in COVID patients.
- Design of the platform's architecture.
- Project winner at Engineering X Pandemic Preparedness program. Funding received.

Researcher 06/2021 - Present

#### Residency of Gathering of Open Science Hardware

Lima, Perú

- Environmental Monitor Project: Design and Calibration of low-cost multi-sensor to measure air quality.
- Implementation of machine learning algorithms for calibration of low-cost multi-sensor.
- Analysis of low-cost sensor data and control data.

### Developer & Researcher

02/2016 - 04/2017

Universidad de Ingeniería y Tecnología - Universidad Cayetano Heredia

Lima, Perú

- Telemedicine in Palliative Care: An Application which helps Caregivers and Medical Staff.
- Implemented Analysis of tools and frameworks to build the platform.
- Funding received by CONCYTEC.

Researcher 12/2015 - 02/2016

Universidad de Ingeniería y Tecnología

Lima, Perú - California, USA

- Organized interviews to analyze teaching methods based on projects.
- Visit to Khan Lab School, Intel Labs, Stanford University, and Carnegie Mellon University.

Researcher 07/2014 - 12/2014

Universidad de Ingeniería y Tecnología

Lima, Perú

- Project: Knee Rehabilitation Machine for patients post-treatment.
- Design and Prototyping. Project made at Fablab Tecsup.

07/2014 - 12/2014 Researcher

Universidad de Ingeniería y Tecnología

Lima, Perú

• CalculAR project: Implementation of an Mobile Augmented Reality Application for Calculus exam in undergraduate students.

• Developed AR Application using Unity and Vuforia.

Researcher 03/2014 - 07/2014

Universidad de Ingeniería y Tecnología

Lima, Perú

• ARShoes project: Implemented an Augmented Reality Application to showcase Retail products to be shown in magazines.

Researcher 05/2013 - 08/2013

Harvard School of Engineering and Applied Sciences Program

Lima, Perú

Designed a functional prototype of a water filter accessible by low resources communities

## PROFESSIONAL EXPERIENCE

eBombo 10/2021 - Present

Software Developer

Lima, Perú

• Development of the core platform and its products: virtual real-time games.

**BBVA** 07/2018 - 10/2021

Analyst Software Engineer & Tech Leader

Lima, Perú

- Led a 5-person team to develop new security features following Agile methodology.
- Implemented 3rd party SDKs for the new branded BBVA mobile application in coordination with BBVA México and BBVA Spain.
- Test-Driven Development (TDD) of new BBVA IVR web platform features using BBVA in-house technologies.

Voz 3D 03/2017 - 03/2018

Software Developer

Lima, Perú

- Implemented the Progressive Web Application (PWA) platform that translates from text or voice speech to sign language represented by a 3D gestural animation. Platform technologies used: Firebase, Three.js, Blender.
- Startup winner at Startup Peru 4G. Funding received.

Bombo 01/2017 - 07/2018

Frontend Developer

Lima, Perú

- Designed software architecture
- Designed UI interfaces and developed Progressive Web Application (PWA). Technologies used: Vue.js, Polymer and Lit-HTML.

#### **PUBLICATIONS**

Telemedicine in Palliative Care: An Application which helps Caregivers and Medical Staff

• Bueno JC., Farfán J., De la Puente J., Peña L., Arce C., **Aróstegui A.**, Malpartida B., Valdivia J., PérezLu J., Egoavil M., Cóndor D., Pinazo M. & Quezada J. (2018). Revista I+i Investigación Aplicada e Innovación Vol. 12, pp 17-25

#### **AWARDS AND ACHIEVEMENTS**

Ministry of Health of Perú (MINSA) 's Hackathon, Perú • Honorable mention	2017
Belatrix's Hackathon, Perú • Winner	2016
Hackathon at Sociedad Nacional de Minería, Petróleo y Energía, Perú • Honorable mention	2016
Hackathon at Universidad de Ingeniería y Tecnología, Perú • Winner	2015

FURTHER TRAINING AND ACTIVITIES	
AWS Machine Learning Foundations Udacity MOOC, obtained by AWS Machine Learning Scholarship	10/2021 Virtual
How to Design for Augmented Reality and Virtual Reality The Interaction Design Foundation MOOC	03/2021 Virtual
Machine Learning Coursera MOOC, audited by Andrew Ng (Stanford University).	02/2020 Virtual

## **Deep Learning Specialization**

06/2020

Coursera MOOC by deeplearning.ai. coursework:

Virtual

- Neural Network and Deep Learning
- Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization
- Structure Machine Learning Projects
- Convolutional Neural Networks
- Sequence Models

Basic electronics and programming of environmental sensors	07/2019 - 08/2019
CTA - Universidade Federale Rio Grande do Sul	Porto Alegre, Brasil
<b>Managed the study group "Dev House",</b> Universidad de Ingeniería y Tecnología Organization of events, workshops, talks, and mentorship	02/2017- 07/2017 Lima, Perú
Global Startup Lab Bootcamp Program	08/2016
MIT - Universidad de Ingeniería y Tecnología	Lima, Perú

#### **AFFILIATIONS**

# Gathering for Open Science Hardware - Member

06/2019 - Present

#### **SKILLS**

Languages: Spanish (Native), English (Fluent, TOEFL iBT 99).

**Programming Languages:** Python, R, Octave, C++, JavaScript, TypeScript, Java, Golang, Rust, Swift, Kotlin, Dart, SQL.

**Frameworks:** Jupyter, Tensorflow, Pytorch, ScikitLearn, Pandas, Node.js, React.js, Vue.js, Processing, P5.js, Flutter, Android, iOS, Arduino, Unity, Vuforia, ARKit, ARCore, Docker.

Cloud Services: DigitalOcean, Amazon Web Services (AWS), Firebase, Google Cloud Platform.