## Antonio Vásquez Briones

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Las Condes -Santiago - Chile

## **Professional Profile**

Automation Engineer with around six years of experience, where the last three years have been in Quality Assurance and Software Product Validation for IC chips optimization products, plus three previous years working in Education of topics like Micro-controllers, Networks and Automatic Control Systems, preceded by experiences as Field Instruments Technician working for several power plants around Chile.

## Education

2007 to 2014 Automation Engineer

Ingeniero Civil en Automatización

Universidad del Bío-Bío. Concepción, Chile.

2007 to 2013 Bachelor of Science Degree in Engineering

Universidad del Bío-Bío. Concepción, Chile.

## **Professional Experience**

## 04-2018 to date

## Synopsys Inc. US. Santiago Office, Senior Research and Development Engineer

Responsible for developing, applying, and maintaining quality standards for the flagship company product Design-Compiler, an IC Chip's synthesis optimization tool.

- Keeps track of the Quality and Stability of the continuous development lifecycle of the product by
  regularly running massive testcases in remote computer farms, monitoring them, gathering
  quality metrics once they finished and applying quality criteria in order to sign-off new releases of
  the product to critical customers like Apple, AMD, Nvidia, Facebook, Google, etc.
- Executes software test plans for new features, detecting issues and the root causes of them.
   Analyzes and writes test standards maintains documentation of test results to assist in debugging and modification of software. Analyzes test results to ensure existing functionality and recommends corrective action.
- Work as technical lead on automation of processes along with partners from Shanghai, Bangalore and US.
- During the stay at the company has attend training at Shanghai China Company Facilities.

## 2018 and 2019

## Capacita OTIC, Arduino Raspberry and IoT SENCE Bootcamp Teacher.

- Leads the one-week SENCE intensive program for teachers from the TI department of INACAP-Chile. During 4 consecutive semesters.
- The program consists in several lessons and activities to prepare teachers from all the country in IoT, Arduino, Raspberry and several open-source technologies.

## 03-2015 to 03-2018

# Universidad Tecnológica de Chile INACAP Concepción-Talcahuano, Full Time Instructor. (*Technological University of Chile*)

- Full-time Academic of the Electrical Department, teaches Automatic Control Systems, Robotics, industrial Controllers, Micro-controllers, and Industrial Networks Courses. Teaches and trains adult and youth.
- SENCE Corporate Training Programs for Companies, Industrial Instruments and Controllers courses.
- Designer of the Domotic system for the Art Gallery of the University. Aug 2017 [link].
- "Reconocimiento Lideres del Sur" prize given by "El Sur" newspaper by his cooperation in the divulgation of technology and robotics to teenagers and young people at social risk. Dec-2017.
   [link]

Leads periodic open workshops of Robotics and Programming for high-school students.

## 07-2013 to 03-2015

## Liceo Industrial Metodista de Coronel, Full time High-School Teacher.

- Full-Time teacher for High-School Electronics Technicians, works mainly with teenagers.
- Lead Teacher of the Robotics Group. First Prize at Inacap Robotics Challenge 2014.

#### 07-2011 to 07-2012

#### Industrial Instruments Field Technician

 Integration, Maintenance, commissioning and troubleshooting of field instrumentation devices for several power plants in BíoBío Region, Chile. Serves as English translator for companies from various locations around the world.

#### 03-2009 to 12-2012

## Universidad del Bío-Bío, Campus Concepción.

Teaching Assistant at Calculus, Motion Control and Systems courses.

## **Additional Details**

## • Computer Science and Programming Languages

- Fluent in Unix Environments. (Terminal, Tmux, Vim, General Scripting, Csh, Bash, Regex)
- Fluent in Python Scripting. Experience in data structures, analytics, parsing, visualization, Machine Learning, web
  development frameworks using Flask and Django and distributed computing using Dask-framework.
- o General knowledge in front-end languages. Html, Javascript, Jquery, CSS.
- o General experience in Agile methodologies and SVN's. Atlassian products like Jira, Confluence and Fisheye. Perforce and Git.

## • Operational Industrial technologies and Hardware

- Experimental and teaching experience setting up multilevel communication environments using protocols like OPC-DA,
   OPC-UA, TCP/IP, Modbus, RS485, Hart and 4-20ma. Interfacing controllers, workstations plus continuous and discrete field instruments
- Experience on development off small-scale remote monitoring cloud-based applications using open source technologies like Arduino, Raspberry Pi, Node MCU and Xbee.

#### Other

Musician, songwriter, singer, and guitarist. Enjoys outdoor activities like hiking and trekking.