

TROMER SEBASTIAN

ELECTRONICS ENGINEER



Date of Birth	24. June 1986 (Age 28)
Nationality	Argentinian
Languages	Spanish, English, German
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ABSTRACT

For the last decade I have been studying and acquiring skills in different areas of Electronics Engineering. My experience on the field has been achieved by working on different University projects with focus on software and hardware development.

I also worked for 7 months as a Hardware and Firmware Engineer for a company dedicated to design and manufacture meteorological stations, mainly focused on vineyards.

I can communicate fluently in English and I am currently working on my German skills. Due to the fact that I lived and studied in Germany for 6 months in context of a DAAD scholarship, I have given speeches and taken classes in English.

My goal is to work in an environment that allows me to acquire new knowledge and experience in new technologies, in innovative projects in where I can grow professionally and personally, preferably in an international environment.

My main areas of interest are: Control Systems, Internet of Things and Artificial Intelligence.

EXPERIENCE

WORK EXPERIENCE

International border monitor

Dirección Nacional de Vialidad (Universidad Tecnológica Nacional)

Dec 2014 - Apr 2015

- Web application, for internal and public use, showing meteorological information and real-time camera photos across two international borders.
- Database synchronization with 3rd party external application of meteorological stations.
- **Technologies:** Python, Web2py, D3.js, Javascript, jQuery, git, MySQL, SQL Server 2008, HTML5, CSS3.

Meteorological stations

Innova Soluciones Informáticas S.R.L.

2010 – 2011 (7 months)

- Improvements made on older hardware to reduce power consumption.
- Communication of analog sensors data through RS485 to central board.
- Communication of digitalized data to GSM/GPRS Telit modem.
- Signal conditioning for PT100 Precision Temperature Sensor.
- Project planning for development of ultrasonic anemometer.
- Requirements paperwork in order to apply for Government funds. Funds successfully received.
- **Technologies:** Microchip PIC16F876A, MPLAB, MPASM, RS232, RS485, PT100.

Electronic voting system

Honorable Legislatura de Mendoza (Universidad Tecnológica Nacional)

2007 - 2010

- Implemented voting system in C#.
- Communication through RS232 with external voting Hardware.
- Automatic generation of reports using Reporting Services.
- Display in external screens using Adobe Flash.
- 2 Years of System maintenance.
- **Technologies:** Microsoft Visual Studio, C#, Microsoft Reporting Services, Adobe flashscript, RS232.

FAT16 implementation for SD cards in PIC16

CEGA Electronics S.A.

2008

- Interface with SD card using PIC MSC module in SPI mode. Programmed in MPASM.
- SD Formatting in FAT16. Creation and writing of files. Programmed in Microchip C18.
- **Technologies:** Microchip PIC16F876A, MPLAB, MPASM, Microchip C18.

ACADEMIC RESEARCH

- Implementation of an energy efficient indoor localization algorithm
- RED SIPIA (Wireless Sensor Network)
- Learning tool for IEEE 802.15.4

OTHER PROJECTS

- PIC Datalogger with SD card / FAT16 support
- Low speed Analog Datalogger through Ethernet
- 1.5 MHz Analog signal capturer board
- Low frequency DSSS generator with PIC
- CESSNA C172P Automatic pilot for FlightGear simulator
- Neuroproductivo

EDUCATION

Electronics Engineer

Facultad Regional Mendoza - Universidad Tecnológica Nacional - Argentina
2004 - 2015

Studienarbeit

Technische Universität Dresden - Germany
Sep 2009 - Feb 2010

- Project: "Implementation of an energy efficient indoor localization algorithm"
- Studienarbeit defended in English. **Note: 1.3**

German Course (B2.1 - B2.2)

Sociedad Goetheana de Mendoza (Goethe Institut Partner) - Argentina
2014

German Course (B2.1)

Institute of Advanced Studies (TUDIAS) - TU Dresden - Germany
Sep 2009 - Feb 2010

PUBLICATIONS

Enabling Low-power Localization for Mobile Sensor Nodes

IEEE - Indoor Positioning and Indoor Navigation (IPIN) 2010

Link: [Go to IEEE Xplore Digital Library](#)

A Low-Power Scheme for Localization in Wireless Sensor Networks

EUNICE'10 Proceedings of the 16th EUNICE/IFIP WG 6.6 conference on Networked services and applications: engineering, control and management / Editor: Springer-Verlag Berlin

Link: [Go to Springer Link](#)

A High Configurable Protocol for Indoor Localization Systems

IEEE - 2011 International Conference on Indoor Positioning and Indoor Navigation (IPIN)

Link: [Go to IEEE Xplore Digital Library](#)

COMMUNICATION SKILLS

Spanish	Mother tongue
English	Professional working proficiency
German	Limited working proficiency (B2)