

Abdon Troche
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abdontroche@gmail.com

EDUCATION

**NATIONAL UNIVERSITY OF ASUNCION - POLYTECHNIC FACULTY ELECTRONICS
ENGINEERING WITH AN EMPHASIS IN MECHATRONIC**
Summer 2011 - Present | San Lorenzo, Paraguay

FAB FOUNDATION FAB ACADEMY
Summer 2019 - Fall 2019 | Lima, Peru
Final Project: [UV/blue transilluminator with image capturer](#)

**TECHNICAL COLLECTION AND PRECIDENT VOCATIONAL TRAINING CENTER CARLOS
ANTONIO LOPEZ GENERAL MECHANIC TECHNIITIAN**
Fall 2015 - Summer 2015 | Asuncion, Paraguay

EXPERIENCE

**FAB LAB UNIVERSITY FROM THE RESEARCH, DEVELOPMENT AND INNOVATION
CENTER OF THE FACULTY OF ARCHITECTURE, DESIGN, AND ART OF THE NATIONAL
UNIVERSITY OF ASUNCION | TECHNICAL ASSISTANT**
July 2019 - present | San Lorenzo, Paraguay

- Working on fabrication - related research/design
- Lead developer of PCB workshops - developing the content of the workshop
- Teaching – giving instructions to interns about digital fabrication

**PLANT MOLECULAR BIOLOGY LABORATORY OF FACULTY OF EXACT AND NATURAL
SCIENCES OF NATIONAL UNIVERSITY OF ASUNCION | RESEARCH ASSISTANT**

March 2018 - present | Asuncion, Paraguay

- The developer of low-cost molecular biology devices for students: [UV/blue transilluminator with image capturer](#).
- The developer of a device for crosslinker with multi-emitter device for in-vitro experiments (in progress): [Development and construction of multiple crosslinkers of riboflavin](#).
- Part of the design team for developing a biomolecular tool for protein silencing molecule target designer: <https://doi.org/10.1590/1678-4685-gmb-2019-0300>
- Part of the design team who wrote an article related to “How to learn Bioinformatics without any background: <http://dx.doi.org/10.18004/rcfacen.2020.11.1.51>

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PO PARAGUAY- NON PROFIT ORGANIZATION | TECHNICAL ASSISTANT

Summer 2016 – Summer 2017 | Asuncion, Paraguay

- CAD designer – Upgrading prosthesis design: [3D printable prosthetic hand](#)
- The developer of devices for improving for the 3D printed prosthetic device production.
- 3D printer machine repairment.
- 3D printer filament of recycled PET plastic for 3D printed prosthetic devices manufacturing: [recycled filament from PET](#).

ROD S.A. PARAGUAY | TECHNOLOGY DEVELOPER

Summer 2020 – Winter 2022 | Ñemby, Paraguay

- CAD designer – Generating 3D models from existing products
- CAD designer – Designing 2D and 3D model for fabrication
- Electronic desing – Selecting parts and serching for suppliers
- Electric and electronic fixing – doing reparations of machines and ebike motors and controllers

SKILLS

Web: HTML,CSS,Markdown.

Programming: Python, C++(embedded), MATLAB, VSCode, Atom, Git.

2D/3DDesign: Fusion360, Solidworks, Eagle(PCBs), KiCad(PCBs), CATIA, MeshMixer, FreeCAD, AutoCAD, NetFabb, 3D Slicer, Inkscape, GIMP, Blender, RDWorks, Slicer Fusion 360.

FabricationTools: Machine shop and woodshop, laser cutter, 3Dprinter, ShopBot, Roland, 3 axes, milling, and tool pathing.

Electronics: AtmelAVR, Arduino, PCB design and fabrication with CAD integration, analog, and digital circuit design, e-bikes system.

PUBLICATIONS

Abdon Troche Rotela, Rolando Álvarez Dagogliano, Nidia Benítez Candia, Rocío Riveros Maidana, Daniel Sánchez Di Martino, Danilo Fernández Ríos, [Development and construction of a multiple crosslinker of ribofavina](#) . 2018

Gabriel José de Carli, Abdon Troche Rotela, Greice Lubini, Danyel Fernandes Contiliani, Nidia Benítez Candia, Thiago S. Depintor, Fabiano Carlos Pinto de Abreu, Zilá Luz

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Paulino Simões, Danilo Fernández Ríos, Tiago Campos Pereira, [SSD - a free software for designing multimeric mono-, bi- and trivalent shRNAs](#) . 2019

Camilo Franco, Rocío Riveros Maidana, Abdon Troche Rotela, Mariana Noto¹ , Andrea Arrúa Alvarenga , Danilo Fernández Ríos, [I want to work in bioinformatics. How do I start?](#) . 2020

TEACHING

Bioengineering and 3D printing [Clubes de Ciencia Paraguay](#), Saint Lorenz, Paraguay 2018

Introduction to 3D design and printing (Theoretical and practical), Polytechnic Faculty of the National University of Asunción, 2018

Work and thechnology teacher, Colegio Japones Paraguayo, 2020-2021

Local Instructor of the Fab Academy, [Fab Lab Universitario CIDI – UNA](#), 2022.

MEDIA COVERAGE/INTERVIEWS

[Elevated Chapter 5, 2018. \(Interview\)](#)

[Newspaper Extra 2018 \(Interview\)](#)

EXHIBITIONS/TALKS

[Light up Conferences](#), 2019.

[Pint of Science Paraguay](#), 2018.

[XXVI Conference of Young Researchers of the Association of Universities Grupo Montevideo](#), Mendoza, Argentina 2018.