# David de los Santos Cuy Sánchez

Mechatronics Engineer

### Summary

I'm a Mechatronics Engineer with experience as web Full-Stack developer, integrating software and hardware for IoT projects. I also work with electronic design, processing signals, microcontroller, linux embedded systems. My passion is about techs development and computer vision systems.

## Experience

2017–Actual **Co-Founder & Technology director**, *Centro de Innovacion y Desarrollo Studio AV S.A.P.I. de C.V.*, Mérida, Yucatán.

- Firmware development
- Cloud based architecture design
- Web development (Backend Frontend)
- Planning and teaching workshops and courses
- Projects
  - AVi Energy Labs Industrial machines monitoring system
  - Puntié Ballet dancer's movement sensor
  - Sinbio dispenser Level liquid meter monitoring system
  - Vinden Urban transport integral system (Software only)
  - SWAPP cloud Taxis management and control system (Software only)
  - Electronics and microcontrollers workshops and courses

2016–2017 **Web Jr development**, Desarrollo de Proyectos de Ingeniería del Suereste S.A. de C.V., Mérida, Yucatán.

Actividades y proyectos:

- o Zenzzer Data analysis web page development
- UrbaTv Start-up of local server
- Vinden Passenger counter sensor development
- Course teaching "Introducción a Raspberry pi"
- Minis2000 Project leader of web development
- 2015 **Programmer**, Áurea Desarrollo Tecnológico, Mérida, Yucatán.

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- Development of a remote weather station
  - Firmware sensor development
  - Programming of computer vision algorithms
- 2015 Maintenance assistant, Momentum Hrx S.A. De C.V., Mérida, Yucatán.

2013 Arduino workshop teacher, Facultad de Ingeniería UADY, Mérida, Yucatán.

#### Education

2011-2016 Bachelor's degree in mechatronics engineering, Universidad Autónoma de Yucatán, Mérida, Yucatán, México, Mechatronics Engineer.

Relevant Courses

2015 Diseño y caracterización de una red de microcontroladores usando la interfaz Bluetooth de baja potencia, Universidad Autónoma de Yucatán, Mérida, Yucatán, México.

Summer residence "Jaguar 2015".

2014 Diseño de programa para la obtención de dimensiones de objetos utilizando OpenCV, Universidad Autónoma de Yucatán, Mérida, Yucatán, México. Summer residence "Jaguar 2014".

#### Skills

development

- Software Server side languages - PHP

  - Framework Laravel
  - Client side languages
    - HTML5 CSS3 Javascript TypeScript
    - Frameworks Bootstrap JQuery Angular
  - Python
    - OpenCV library
  - SQL databases
  - o C#
  - o C++
  - o C

Embedded • Cypress

- systems Atmel
  - Espressif
  - Particle.io
  - Raspberry Pi

- Extras PCB design (KiCad)
  - CAD design (SolidWorks)

#### Languages

Spanish Native language English Intermediate