# **BEN SHEN DENG**

#### **Control and Optimization Engineer**

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♥ Taipei, Taiwan

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### **SUMMARY**

Control engineer with the ability to solve complex engineering and process problems. Currently is seeking a job position of research engineer.

### **STRENGTHS**



#### **Teamwork & Communication**

Strong team collaboration skills. Work closely with team members to achieve engineering goals.



#### Research

Implementing and testing algorithms.



#### Persistence & Hardworking

The ability to work under pressure.



#### Organization

Capable of multi-tasking and have he self-drive to get things done on schedule.

### **SKILLS**

Python

Matlab

Linux

## **LANGUAGES**

Portuguese English Chinese Spanish



## **CERTIFICATIONS**

 TOEIC, Nov. 2019 score: 895 (List: 485 / Read: 410)

## **HOBBIES**

Workout

Chess

Travelling

## **PUBLICATIONS**

### **EDUCATION**

#### B.S. in Control and Automation

#### Centro Federal de Educação Tecnológica Celso Suckow da Fonseca

## Fev 2006 - Dec 2010

Rio de Janeiro, Brazil

#### M.S. in Automation and Control (GPA 4.0)

#### National Taiwan University of Science and Technology (NTUST)

m Sept 2012 - Jul 2014

♥ Taipei, Taiwan

- Thesis: Path Planning Analysis of a 6-DOF Serial Manipulator based on PID and Sliding Mode Controllers.
- Emphasis on laser and robotics.

## Ph.D. in Automation and Control (GPA 4.0)

#### National Taiwan University of Science and Technology (NTUST)

🛗 Sept 2014 - June 2020

♥ Taipei, Taiwan

- Dissertation: Distributed Optimization of Large-scale Nonlinear Circuits using the Harmonic Balance Method.
- Concentration in Control Theory and Optimization Algorithms for Large-scale applications.

## **EXPERIENCE**

#### **Electrical Engineer Intern**

#### Centro de Pesquisas de Energia Elétrica (CEPEL)

April 2008 - April 2010

**♀** Rio de Janeiro, Brazil

Worked in a team environment to design a preventative maintenance procedure for power transformers.

### Control System Engineer Intern

#### IntelligenX

May 2020 - June 2020

 Assisted on the development of optimal camera placement for automated optical inspection.

## Control System Engineer

### **Taiwan Innovative Space (TiSpace)**

October 2020 - Present

- Role consists in supporting the early development of a satellite system for communication satellite with a focus on the preparation of documents and procedures for the components manufacturing. Assist in the satellite project requirements, mission planning, review budgets, review specifications, and test procedures including environmental tests.
- Developed algorithms and test platforms for attitude determination and control system. Designed ADCS components (sun sensor, star tracker, and magnetic torquers).
- Designed solar array, role includes cover-interconnect-cell, honeycomb sandwich panel, and deployment system.