

Josias Sakai

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EDUCATION

Northeastern University — Boston, MA

Expected May 2020

Bachelor of Science in Electrical Engineering

GPA 3.20

Awards: Northeastern National Hispanic Scholar

COURSEWORK

Circuits and Signals	Probability and Statistics	Networks
Embedded Design	Differential Equations	Calculus III
Linear Systems	Engineering Design	Physics II

TECHNICAL SKILLS

Circuit design and troubleshooting	Software: PSpice, Microsoft Office, Solidworks,
Using diagnostic electronic equipment	Multisim, AutoCAD, SketchUp
Soldering and circuit assembly	Programming: C++, HTML, Python, MATLAB
Designing printed circuit boards	OSHA 10 Hour Certification
Working with power tools	Fluent in Portuguese

RELEVANT EXPERIENCE

International Rectifier HiRel Products, Inc. — Leominster, MA

Summer 2016, Spring/Summer 2015

Process Engineering Intern

- Worked on three cost-saving projects concurrently in a deadline-driven environment.
- Developed procedures for a temperature cycling test to run in electric temperature chambers as opposed to an older system reliant on expensive liquid nitrogen.
- Constructed and collaborated on design of two test beds for different component package types in order to maximize capacity and regulate air flow.
- Performed various experiments, then compiled and analyzed experiment data in Excel; addressed observations in detailed PowerPoint reports which were presented to superiors.
- Operated Tesec, Yokogawa, and custom test systems.

PROJECTS

50-Watt Audio Amplifier

May 2015

- Designed circuit to meet voltage requirements and match pin-out diagram of the chosen amplifier chip.
- Customized and milled a printed circuit board to fit circuitry.
- Drilled into project box for air circulation and to accommodate external components.
- Used in a personal speaker system to this day; has required no maintenance since assembly.

Variable 30 Volt DC Power Supply

September 2014

- Used to demonstrate the function of transformers and rectifier circuits.
- Modeled project box with customizations in SketchUp.
- Assembled project which included: voltmeter, switch, indicator LED, fuse port, AC input, dial, and output jacks.
- Power supply is used to power electronic kits for testing.

LEADERSHIP EXPERIENCE

Music Team Coordinator at Hope Chapel — Sterling, MA

2013-2016

- Managed a seven-person team of singers and musicians for performances at weekly youth meetings.
- Organized music set lists and practice times through frequent communication.

Volunteer Service Trip — Dominican Republic

February 2014

- Spoke at length for large public engagements on two occasions.
- Led groups of children in games and other social activities.