(952) 393-9843

https://www.linkedin.com/in/alex--gonzalez/

#### PERSONAL PROFILE

Pursuing a career in Computer Engineering that will utilize my educational background, work experience and leadership skills.

Languages: English, Spanish

**Skills:** C/C++, Java, Python, Linux environments, LabVIEW, MATLAB, LaTeX, Mathematica, CAD, CNC, G-Code, Analog and Digital Devices, Embedded systems for Software and Firmware at Kernel levels

#### **EDUCATION**

Bachelor of Science, Physics and Computer Engineering & Minor in Mathematics (2021)

Bethel University, St. Paul, MN

#### **WORK EXPERIENCE**

## **Physics and Engineering Teachers' Assistant**

2018 - 2021

Bethel University, St. Paul, MN

- Organize and lead research projects, managing help sessions for students for both hardware and software including Oscilloscopes, Multimeters, Spectrum analyzers, and various other instruments
- Set up a Tormach CNC based mill using CAD programs and G-code
- Completed senior research in Digital Dual-Beam Spectrophotometry using lasers, C, and Python

## **Embedded Software Engineer**

Spring 2019 - Winter 2020

Trimble Transportation, Eden Prairie, MN

- Solved problems. Communicated and collaborated using Agile as a part of a Scrum team
- Worked at kernel level in embedded systems using C/C++ within a Linux environment as well as Python and Java to develop and maintain software and firmware
- Contributed to a research project using Mathematica exploring the effects of Amazon, Uber, and autonomous vehicles on the trucking industry, and, specifically, on Trimble as a company

#### **Lead Machinist and Programmer Intern**

Summer 2018

Atlas Barrel Company, Watertown, MN

- Lead machinist and programmer for CNC based milling machine both on hardware and software
- Automated hardware, used G-code for programming, as well as C++, Python, Java and CAD software

## Machinery Developer - "Cooper" Intern

2016 - 2017

2017 - 2018

Atlas Barrel Company, Watertown, MN

- Handcrafted 53-gallon whiskey barrels from White American oak
- Developed machinery/instruments to enhance the mechanism and efficiency of barrel making process

## **CAMPUS & COMMUNITY LEADERSHIP**

# Worship Team Administrator 2014 - Present Bethel University, Eagle Brook Church, Emmanuel Christian Center, Westwood Community Church

Bethel Student Government

**Director of Student Ministries** 

Young Life Leader 2013 - 2016

# **AWARDS**

President's Volunteer Service Award, Minnetonka High School, 193 hours

2016

# **REFERENCES**

Tom Robers: former Embedded Software Engineering Manager, Trimble Transportation – (605) 215-7031 – roberts216@gmail.com

JonCarlos Velez: Mentor and Worship Pastor, Emmanuel Christian Center - (262) 443-5631

Greg Sumners: Owner, Atlas Barrel - (612) 750-4549

# **GitHub Repository**

