# Thomas Jagielski

Campus

MB 130 1000 Olin Way Needham, MA 02492 tjagielski@olin.edu Permanent

4416 Vincent Avenue South Minneapolis, MN 55410 612-500-6964

## Education

#### OLIN COLLEGE OF ENGINEERING - NEEDHAM, MA

MAY 2022

· Bachelor of Science in Electrical and Computer Engineering

GPA: 4.0

- · Half-Tuition Scholarship Recipient
- Relevant Courses: Computer Architecture; Introduction to Microelectronic Circuits; Quantitative Engineering Analysis; Principles of Engineering; Software Design; Introduction to Sensors, Instrumentation and Measurement; Discrete Math

# SOUTHWEST HIGH SCHOOL - MINNEAPOLIS, MN

**JUNE 2018** 

Valedictorian, IB Diploma, AP Scholar Award, Yale Book Award Recipient

GPA: 4.0

## Experience

## OLIN COLLEGE | INTRODUCTION TO MICROELECTRONIC CIRCUITS | COURSE ASSISTANT FALL 2020

- Helped students develop intuition and methodologies for transistor level design and operation of bipolar and CMOS circuits through review sessions and SPICE simulations
  - o Focused on single-transistor amplifier stages, current mirrors, differential pairs, and single-stage op-amps

#### GRACO INC. | MINNEAPOLIS, MN | ELECTRICAL ENGINEER INTERN

**SUMMERS 2019 AND 2020** 

- Worked for Applied Fluid Technology and High-Performance Protective Coating division
  - New product design testing and verification
    - Developed a sensorless motor control algorithm for PIC microcontroller
    - Product improvements for spray foam insulation system for homes, industrial/commercial buildings, and roofing jobs
  - Warranty return hardware debugging for future design improvements
  - Developed automation system for Altium documentation
  - Experience with oscilloscopes, power supplies, multimeters, and current clamps

## GRACO INC. | MINNEAPOLIS, MN | AUTOMATION INTERN

**SUMMER 2018** 

- Designed, built electrical panel, and programmed PLC for a fixture to improve ergonomics of protective coating application manufacturing
- Developed a LabVIEW program that pulled assembly line data, performed computations, and displayed metrics to improve assembler productivity and increase yield

## VOLUNTEER COUNSELOR | BAKKEN MUSEUM | ELECTRICAL MUSEUM

**SUMMER 2015-2017** 

- Assisted program participants in creating innovative projects such as radio jamming circuits or solar powered model cars using the Bakken process: Think it, Make it, Improve it, Show it
- · Learned project development and the engineering process

# <u>Skills</u>

- · Verilog, Python, LTspice, MATLAB, Glade Integrated Circuit Layout Software, KiCAD, PCB design, Mathematica, Altium, Arduino, AutoCAD Electrical, LabVIEW, SolidWorks, C Programming Language, 3d printing, and laser cutting
- · Project Portfolio Website: https://thomasjagielski.github.io/Project-Portfolio/

# **Activities**

- · Olin Rocketry Club Goal is to launch a rocket to 10,000 feet
  - o Designed avionics main flight computer PCB for inflight altitude, GPS, and gyroscopic sensing
  - o Started Microelectronics Research sub-team to develop standard cell library using a C5N process