# **Christian Strommen**

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<u>LinkedIn</u>

<u>GitHub</u>

Website

## **Experience**

#### MAY 2022 - SEPTEMBER 2022

TESLA - BROOKLYN PARK, MN - AUTOMATION CONTROLS ENGINEERING INTERN

- Developed automated robotic production systems for automotive manufacturing
- Programmed Rockwell and Siemens PLCs for industrial control and integration
- Optimized industrial networking for cross-system compatibility

#### MARCH 2021 - MAY 2022

NORTECH SYSTEMS - MAPLE GROVE, MN - AUTOMATION ENGINEERING INTERN

- Programmed autonomous cobot-style robotic systems for precise manufacturing
- Reduced cycle times of production lines by 35% while decreasing labor costs by 25%
- Designed and implemented an automation process development and implementation framework

#### **MAY 2019 - SEPTEMBER 2019**

MINNETRONIX MEDICAL - SAINT PAUL, MN - MECHANICAL DESIGN ENGINEERING INTERN

- Designed biocompatible parts for intracranial neuro therapy devices (<u>device patent</u>)
- Developed CNC machining processes for rapid injection mold tooling design
- Wrote firmware for 3D printers in C++ to expand material capability and quality

#### **MAY 2017 - SEPTEMBER 2018**

MINNETRONIX - SAINT PAUL, MN - MECHANICAL ENGINEERING INTERN

- Designed test fixtures for verification COMSOL thermal fluid flow simulations
- Built GRBL gantry robotic systems for micron-scale adhesive application
- Built laser measurement test fixtures for product quality and calibration

#### **Education**

#### AUGUST 2020 - MAY 2024

UNIVERSITY OF MINNESOTA, MINNEAPOLIS, MN - B.S. MECHANICAL ENGINEERING

## **Projects**

- 3D printing hardware and firmware for enterprise capabilities on inexpensive printers
- Virtualization and containerization for web deployments using Docker and Kubernetes
- Optimizing machine learning workloads for arm64 processors using VQGAN and CLIP
- RFID chicken tracking system for our small hobby farm
- Autonomous racing drones for high-speed cinematography

### **Technical Skills**

- Mechanical design using SOLIDWORKS, Fusion360, PTC Creo, and Autodesk Eagle
- Software development for microcontrollers in C++, Java, and Python
- PLC programming in Siemens STEP/TIA and Rockwell Studio
- 3D printing and CNC machining using CAD/CAM software
- Linux development for open source blockchain, machine learning, and Docker