

SUMMARY: *Well-rounded software engineer with some experience in Controls and Automation, Electrical, and Mechanical work as well.*

EDUCATION: **Michigan State University**, 2014-2019 3.16, 3.4 GPA
Bachelor of Science in Computer Science Dean's List, Spring 2018

EXPERIENCE: **KUBICA CORP.**, Novi, MI
Software Engineer, May 2019 - Present

- Crafted PWAs using Angular to work both on and offline, being indistinguishable from native apps
- Created mission-critical real-time financial application with multiple redundancies
- Researched and developed novel automated inspection and tooling adjustment system
- Wrote optimized drivers and wrappers to interface with new PLC technology
- Lead project development teams to successfully develop and deploy customer solutions
- Lead an R&D team to develop a reverse lookup engine for cutters and other machine tools

Controls Engineer Intern, May 2018 – August 2018

- Developed programs for factories using Allen-Bradley ControlLogix PLCs
- Deployed programs during production in factories

Software Engineer Intern, May 2017 – August 2017

- Developed in the .NET stack, working directly with customers on projects
- Developed web apps in Angular, adjusting on the fly during deployment based on customer needs

PRECISION KARTING TECHNOLOGIES, Wixom, MI
Website Developer, CNC Machinist, Shop hand, October 2013 – Present

- Experience developing websites using HTML, JavaScript, and CSS
- Programmed and ran CNC Lathes and Mills using GibbsCAM and Fusion 360
- Worked with heavy machinery and hand tools

VOLUNTEER: **ERROR 404/WAVERLY FIRST ROBOTICS TEAM**, Lansing, MI
Founder and Lead Mentor, October 2017 – Present

- Started a world-class high school robotics team
- Secured grants, funding, and donations in excess of \$500,000 for the team and school district
- Successfully competed in the 2018, 2019, and half of the 2020 FIRST Robotics Competition seasons
- Invited and to the 2018 World Championship as the best rookie team in Michigan
- Designed and manufactured customized COVID-19 barriers for the entire school district, and surrounding districts.

PROJECTS: **ONGOING**

- **Fusion 360 Serial Add-On** – A paid add-on for Fusion 360 written in Python using Autodesk APIs to add RS-232 serial capability to send and receive programs to and from older CNC machines
- **Waverly Robotics T-Shirt Cannon Robot** – A robot designed in collaboration with the students to launch t-shirts. Not only designed to be extremely durable, but also extremely safe for inexperienced operators.

PAST

- **Waverly Robotics Team Management Software** – Website to track student time, skills, contact information, and emergency information. Written in Angular and PHP with a homemade framework.
- **MSU Capstone: Aptiv Vehicle Scheduler (2018)** – Group project to create a scheduling web app for Aptiv's autonomous vehicles, using Angular and C#, and the SCRUM methodology to develop. Developed in collaboration with Aptiv's AMDAS team.

More examples of my work can be found on <https://chadkrause.com/> and <https://github.com/Chad-Krause>

SKILLS: C#/.NET Framework, Angular 2+, Python, PHP, Allen-Bradley ControlLogix, Java, Labview, Ubuntu with Apache, Windows Server 2016, Fusion 360, CAD/CAM