

# Alejandro Vegas

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## Experience

### Design Engineer, R & D, Owner

*December 2017 - Present*

VSR Products LLC

Glendale, Wisconsin/Minneapolis, Minnesota

- Independently developed VSR Products, which 3D prints parts for model cars and drones, and sells CAD files to manufacturers
- Built a website/eCommerce, conduct dealer negotiations, **design and prototype parts using CAD** and 3D Printing
- Own and operate 7 high-end 3D printers both FDM and SLA for production, approximately **9000 units sold in 18 countries**
- Negotiate and **communicate with customers and wholesalers**

### Product Development Engineer

*January 2017 - Present*

Motiv RC

Waukesha, Wisconsin

- **Designed and tested parts** for model vehicles, for **production in CNC machining and 3D Printing**
- Represented Motiv RC at professional events, customer outreach
- Created ad campaigns on Facebook, Instagram, and Google for products

### Retail, Repairs, Customer Service

*February 2014 - August 2018*

Trackside Hobbies

Brookfield, Wisconsin

- Worked in **customer relationship management**, operated register

## Projects

### Wireless Charger for High Voltage Applications

*February-August 2019*

VSR Products, LLC

- Invented, prototyped and tested a **wireless charging system** for applications that require more than 5 volts (i.e. cordless drills, electric leaf blowers, remote controls for drones, etc.)
- Implemented **3D printing and electrical circuitry** to create a clean and finished product that was then marketed to RC drone and car users, by Facebook and Google advertisements. This product was sold under the VSR Products brand.

### Automated Drink Robot w/Custom Peristaltic Pump

*September 2019- December 2019*

UMN Mechanical Engineering Course

- Designed in Creo and Solidworks a complete **85 part assembly** for a drink dispensing robot
- Created a custom peristaltic pump, 3D printed and laser-cut components
- Programed an Arduino UNO to work with an RFID reader, stepper motor, LCD screen, and RGB LED strip
- Given Judge's favorite award at University-wide show by 3 out of 5 judges.

## Education

### Bachelor of Mechanical Engineering

*Expected May 2022*

College of Science and Engineering, University of Minnesota-Twin Cities | GPA 3.3

### CSE Global Seminar in Spain

*January 2019*

### German American Partnership Program (GAPP) Exchange

*June-September 2016*

**Relevant Coursework:** Statics and Dynamics, Material Science, Body Deformation Mechanics, Thermodynamics

## Skills

**Software:** Solidworks, Creo 5.0, C++, MATLAB, MasterCAM, Fusion360, VCarve Pro, Microsoft Office,

**Foreign Languages:** Fluent Spanish, intermediate German

**Technical Skills:** Arduino, Soldering, Circuit building, reverse engineering, 3D printing, CNC 3-axis

## Leadership

**Business Owner:** VSR Products LLC (parts for drones and high-performance RC vehicles)

*December 2017- Present*

Managing 1-4 employees, and negotiating with distributors and sponsored drivers

**Captain/Manager:** University of Minnesota Intramural Soccer Team

*2018-Present*

Organize and lead intramural soccer team of 23 students

**Project Leader:** 3D Modeling class project to send a balloon into the stratosphere

*September 2017- May 2018*

Voted Project Leader for a senior design class, managed and organized a class of 34