

## Cole Nielsen

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### Education

University of Minnesota - Minneapolis, MN (Fall 2014 - present)

*B.S. - Electrical Engineering, expected graduation May 2017*

University of Minnesota - Minneapolis, MN (Fall 2013 - Spring 2014)

*Full time PSEO student, Deans List Fall Semester, GPA 3.65*

Prior Lake High School - Savage, MN (Fall 2010 - Spring 2014)

*Diploma, Board Scholar, GPA 3.889*

### Experience

Circuitcell (6/2014 - present)

*Designed and built battery test fixture, assembled product.*

Mystic Lake (8/2012 - present)

*Hosted and bussed. Customer service experience.*

First Robotics - FRC (2010 - 2014)

*Captain and lead of robot mechanical design during 2014 season for team 2169 KING TeC. Used and gained proficiency with 3D CAD software (Autodesk Inventor), mechanical drawings, assembly and design.*

First Robotics - FTC (2009 - 2010)

*Mechanical and electrical design/assembly of team robot.*

### Recent Personal Projects

Tesla Coils: *Completely built and designed several solid state tesla coils from scratch, including the PCBs (designed in Eagle PCB, manually etched).*

Amplifier: *Built and designed a 2.1 channel amplifier including the mechanical assembly, circuitry and PCBs.*

Repaired broken Ludlum radiation survey meter: *Reverse engineered and then diagnosed the issues with the meter and fixed them.*

### Skills

Electronics: *EDA software (Eagle PCB, KiCAD), SPICE, Soldering, circuit design, microcontrollers, know how to operate test equipment like oscilloscopes, function generators etc.*

Mechanical design: *3D CAD software (Good with Inventor, can use Solidworks)*

Software and programming: *Linux and Windows, Microsoft office, C/C++ (improving skills with C/C++ class now), EDA/CAD.*