

Andrew Vetter

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Objective	I am a passionate Software Engineer, growing in embedded Linux development.
Education	Computer Engineering, B.S. May 2020 Computer Science Minor <i>North Dakota State University, Fargo, ND</i> GPA: 3.53/4.0
Work Experience	Software Design Engineer June 2020 - Now <i>John Deere Electronic Solutions, Fargo, ND</i> <ul style="list-style-type: none">• Create and maintain embedded Linux operating systems for vehicle displays and controllers• Use Yocto and buildroot to develop embedded Linux operating systems to customer needs• Create and document software-hardware interfaces for various components on controllers• Advocate, manage, and maintain sensible software practices for automated testing infrastructure Part-Time Student Software Engineer Mar. 2018 - May 2020 <i>John Deere Electronic Solutions, Fargo, ND</i> <ul style="list-style-type: none">• Develop unit tests in Python to test embedded controllers and displays• Create Python scripts and tools that improve the effectiveness of other engineers• Collaborate with Agile scrum team during code reviews, planning, and design meetings• Maintain and release updates to products currently in production• Manage and prioritize time and tasks between multiple supervisors• Improved and maintain continuous integration infrastructure such as Jenkins and HILs First Lego League Outreach Coordinator Aug. 2017 - Mar. 2018 <i>NDSU College of Engineering, Fargo, ND</i> <ul style="list-style-type: none">• Organized the FIRST Lego League (FLL) Qualifiers for 60 teams• Successfully managed NDSU outreach equipment that is used by various groups• Managed a \$5,000 budget donated by sponsors to organize events Undergraduate Research Assistant May 2016 - Aug. 2017 <i>Electrical Engineering Dept., NDSU, Fargo, ND</i> <ul style="list-style-type: none">• Collaborated in group discussion to redesign a modular spectroscopy device• Designed a PCB to be used in spectroscopy device• Organized detailed documents about research and standard operation procedures
Personal Experience	Bison Robotics Member and Officer Sept. 2016 - Now Member <ul style="list-style-type: none">• Contribute ideas, wiring skills, and mechanical design skills for the robot in 3 days project• Integrated encoders into the autonomous snowplow project• Recruited members to the organization• Develop Robot operating system nodes for quadcopter, NRMC robot, and snowplow projects to interface with hardware such as LIDAR, cameras, encoders, and motor controllers Autonomous Snowplow Project Lead Jan. 2019 - Now <ul style="list-style-type: none">• Plan project budget, timeline, and achievable objectives for the project• Manage a ten person team to design, build, and test an autonomous snowplow President May 2018 - Apr. 2019 <ul style="list-style-type: none">• Fostered relationships with community groups and sponsors• Planned the yearly budget of \$55,000 for all of Bison Robotics Project Manager Officer May 2017 - Apr. 2018 <ul style="list-style-type: none">• Encouraged productive project meetings that aided new members for joining the projects• Resolved budget and planning issues between projects
Skills	Computer Languages: Python, Bash, Makefile, Java, C/C++, VHDL, Windows Batch Software: Linux, Bitbake, git, Yocto, Buildroot, Microsoft Office, Libre Office, Matlab, Quartus, Creo 3, Jenkins
