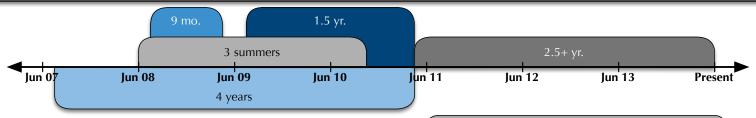
# Ross Kippenbrock

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#### Rose-Hulman Institute of Technology

B.S., Mechanical Engineering, May 2011 GPA: 3.71/4.00

#### Rose-Hulman - Sophomore Advisor

- Provided community resources, academic support, and lived with 50 underclass residents for a year
- Organized many activities for the students including service projects for the community such as Bikes for Tykes

#### Formula SAE - President / Technical Director

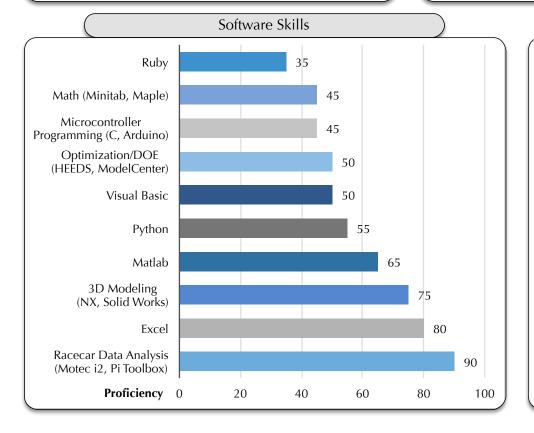
- Co-founded the Society of Automotive Engineers and the Formula SAE team at Rose-Hulman
- Formula SAE is a project where students design and build a small, formula style racecar from scratch and enter in a competition with over 100 other teams from other schools around the world
- Led and collaborated with 20+ other students and school faculty throughout the project to ensure success
- Initiated contact with corporate and private sponsors to secure funding for club activities
- Accountable for management, design, fabrication, and performance decisions on the Formula SAE project
- Employed the use of Matlab, Excel, and SolidWorks to design, test, and analyze components for the vehicle
- Voted runner-up for most valuable FSAE team leader at the Michigan competition, and for most valuable club president among all school clubs

#### Andretti Autosport - Engineering Intern

- Served as a research and development designer for a majority of the internships
- Designed many parts for various testing programs, including wind tunnel and chassis testing
- Collaborated with a team of designers and engineers to improve vehicle performance
- Utilized NX CAD and CD-Adapco CFD software for design work
- Traveled as an engineer in the USF2000 series for three events
- Applied analysis of vehicle data and onboard video in order to coach the driver to improve performance

### Joe Gibbs Racing - Race Engineer

- Traveling engineer for #11 and #18 Sprint Cup NASCAR teams
- Analyzed data from track testing, simulation software, tire testing, 8 post testing, and the wind tunnel to generate vehicle setup options and evaluate changes before and during race weekends
- Advised crew chief on strategy options during races
- Created various software tools with Excel/VBA and Matlab to improve productivity of the engineers
- Worked on several development projects, including implementation of a DOE/optimization software package (HEEDs) with the vehicle simulation tools
- Served as beta software tester for simulation package; coordinating with offsite developers to implement changes and improvements
- Part of successful teams, including five race wins with the #11 in 2012 and one in 2013, two with the #18 in 2011



#### Activities

I am an avid cyclist, and rode in eight different states this year.





I traveled over 60,000 miles this past year, and visited 22 states...many of them twice.

I love hiking, backpacking, and taking pictures of beautiful landscapes.





I grew up with a ping pong table and played every day after dinner my freshman year of college.

I enjoy making things, especially electronics projects with Raspberry Pi and Arduino.





I am experienced with welding and machining.

I am passionate about learning and reading, and recently finished my first MOOC.

