

*Permanent Address*  
732 Regent Dr.  
Crystal Lake, IL 60014

**Alex R. Allmandinger**  
(815) 690-7104 | allmand2@illinois.edu

*Campus Address*  
207 E. Gregory Dr., URH 2229  
Champaign, IL 61820

## Education

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University of Illinois

B.S. Mechanical Engineering

- Class President - Mechanical Science and Engineering Department
- Formula Society of Automotive Engineers
- Intramural Soccer Team Captain

Urbana - Champaign, IL  
Expected Graduation - May 2016  
GPA 3.94/4.0

## Experience

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Caterpillar Inc.

Corporate Engineering Intern / Student Practicum

Motor Grader Configuration

- Full Machine Model Structural Skeleton
  - Analyze and resolve issues with form and function
  - Enabled front axle machine motion and machine articulation
- Legacy Parts
  - Reverse engineered outdated supplier prints to create new parts
  - Update the parts and prints to current Caterpillar standards
  - Find new supplier to resume production and support machines in the field

Decatur, IL / Champaign, IL  
May 2013 - Present

Illini Motorsports - University of Illinois Formula SAE

Aerodynamics Team Member

- Drag Reduction System Project Lead
  - Design and validate a pneumatic system to change angle of attack of wing elements
  - Manage and assign projects
- Jacking Bar / Rear Wing Mounting
  - Design jacking bar per 2013 FSAE Rules
  - Simulate load cases to validate design before manufacturing
- Manufacturing
  - Cut and prepare high density foam molds for the composite layup process
  - Complete carbon fiber manufacturing for wings, side pods, hood, nose cone, steering wheel, and diffuser

Urbana - Champaign, IL  
August 2012 - Present

Crystal Lake Soccer Federation

Soccer Referee

- Provide a safe, fun environment for young athletes to develop
- Guide players and act as a positive role model

Crystal Lake, IL  
Fall 2006 - Spring 2012

## Honors

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- University of Illinois College of Engineering Dean's List
- Engineering James Scholar Honors
- US Army Reserve National Athlete / Scholar Award

Fall 2012 - Present  
Spring 2013 - Present  
2012

## Proficiency

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- Skilled with Pro Engineer Creo 2.0
- Experienced in Microsoft Office Products
- Familiar with Star CCM+ Computational Fluid Dynamic Software
- Knowledgeable with Matlab and C++ coding languages