



# CHASE ROBERTS

Computer Science • Mathematics

## CODING SKILLS

Python  
C/C++  
C#  
Javascript  
Lua  
HLSL

## CURRENT CREDITS

### Relevant Courses

Machine Learning  
Modern Binary Exploitation  
Algorithms  
Data Structures  
Quantum Physics

## HIGH SCHOOL

### Waseca High School Class of 2014

GPA 3.56 (4.0 Scale)  
National Honor Society (2014)  
Gold Medalist State Science Olympiad (2014)  
Math Team Medalist and Captain (2013-2014)  
Best Actor Award (2013-2014)

## AP CREDITS

AP Calculus BC - 5  
AP Calculus AB - 5  
Physics C Mechanics -5  
Physics C E&M - 5

## FINE ARTS ACTIVITIES

### Drama Productions

Seusical  
Importance of Being Earnest  
The Mouse That Roared

### Music

Marching Band - Drumline

## View Github:

[github.com/Thenerdstation](https://github.com/Thenerdstation)

Waseca Minnesota  
507-461-5169  
[roberc4@rpi.edu](mailto:roberc4@rpi.edu)

## CURRENT EDUCATION

### Rensselaer Polytechnic Institute • Class of 2018

GPA: 3.85 Major GPA: **4.0**  
Recipient of the 2024 Lally Bicentennial Award  
Enrolled in the School of Science working towards a Bachelor Degree in Computer Science and Mathematics. Expected graduation is May 2018.

## SOFTWARE INTERSHIP

### Intentional Software Intern

*Summer 2015*

Was a member of the graphics team. Worked on shader meta program implementation. Decreased shader build time from several minutes to a few seconds with dynamic compilation. Also added features to the 2D Geometry API, focusing on efficient elliptical and Bezier curves rendering.

## EXTRA-CURRICULAR ACTIVITIES & LEADERSHIP

### Modern Binary Exploitation

*Student Spring 2015, to be TA Spring 2016*

Class taught by the members of RPISEC. Learned how to open shells on insecure 32 bit Linux servers. Had to bypass DEP with ROP, ALSR with partial overwrites and pointer leaks, and stack canaries with write arounds. Even did basic Linux Kernel exploitation.

### RCOS

*Spring 2015*

Created an easy-to-use drag and drop application for Arduino programming. Goal was to lessen the learning curve for inexperienced programmers. Implemented as a modification of Google Blockly.

### Embedded Hardware Club/OSCAR project

*Officer 2015*

Leader of Open Sourced Customizable Aerial Robot (OSCAR) project, funded by EHC. Team of 5 engineers. Our goal is to create a fully modular drone that can be modified to accomplish any task.

### Hack RPI

*Fall 2014*

Team of 3 software engineers. Created an Android app that allowed users to quickly swap contact information by scanning a QR displayed on screen. The app stored users' information on a cloud server that I wrote in Node.js.

### Founded Waseca Programming Club

*Club Head and Founder 2013-14*

Founded Waseca High School's first programming club. Taught Python and C# to over 20 student members. The popularity of the club lead to the school creating AP Computer Science classes the following year.

## WORK EXPERIENCE

### Historical Society

*2010-2013*

Worked to help plan and execute the annual Chitakwa gathering at the Historical Center, as well as assisting with the center's upkeep and landscaping

