

# Amber Rawson

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[Amperess.github.io](https://Amperess.github.io) | [github.com/Amperess](https://github.com/Amperess) | [linkedin.com/in/amberrawson](https://linkedin.com/in/amberrawson)

## Education

*Rutgers University, School of Engineering*

Dean's List - Fall 2016, Spring 2017

Electrical and Computer Engineering & Computer Science double major

Sept 2016-Present

Cumulative GPA: 3.711/4.0

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## Research Experience

*GRIST Lab Security Protocols*

May 2017-Present

- Collaborated to create a strategy game where attackers strike certain targets while defenders try to counter their attacks and capture them
- Player data is gathered to develop an algorithm that can improve the probability of the attacker being captured, which can then be applied to law enforcement's defense strategies
- Developed a 3D environment using Unity Game Engine and wrote scripts to realistically spawn crowd agents according to exponential distribution

*Synthetic Census Data Generation*

Feb 2017- May 2017

- Used Python libraries to analyze interdependence of factors such as utility costs, annual income, and geographical region in 2015 New Jersey Census housing data
  - Measured correlation values to construct a max weight spanning tree that can be used to anonymize data
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## Activities

Intramural Volleyball (Captain)

Fall 2016-Present

Learned event coordination and time management by organizing weekly practices for ten team members

Craft to Cure Club

Fall 2016-Present

Participated in monthly craft related volunteering activities

Makerspace

Fall 2016-Present

Learned how to create dxf files and operate a laser cutter

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## Relevant Courses

*Current:*

Principles of Electrical Engineering

Digital Logic Design

Linear Algebra

Multivariable Calculus

*Past:*

Calculus (I and II)

Data Structures

Matlab

Physics: Electricity and Magnetism

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## Proficiencies

**Languages:** Java, C#, HTML, CSS, Javascript, Python

**Other:** Unity Game Engine, Github