

Amber Rawson

601 Silverton Place, Piscataway, New Jersey 08854
amber.rawson@rutgers.edu • 732-735-1505

Education

Rutgers University, School of Engineering

Sept 2016-Present

Dean's List - Fall 2016, Spring 2017

Cumulative GPA: 3.709/4.0

Electrical and Computer Engineering & Computer Science double major

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
-

Organizations

Intramural Volleyball

Fall 2016-Present

Intramural Ultimate Frisbee (Captain)

Spring 2016-Present

Makerspace Club

Fall 2016-Present

Craft to Cure Club

Fall 2016-Present

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