

# ANDREW WANG

## SOFTWARE ENGINEER

✉ contact@andrewyw.io  
🌐 www.andrewyw.io  
☎ (908)-655-5137  
📍 New York City  
in /in/andrewyw  
🔗 AndrewYW

## Skills

### TECHNOLOGIES

Python  
Ruby  
Javascript  
Java  
Ruby on Rails  
React/Redux  
SQL  
HTML5  
CSS3  
Git  
nodeJS  
MongoDB  
Android  
Express

### NOTABLE COURSEWORK:

Computer Science: Data Structures, Computer Architecture, Software Methodology, Principles of Information and Data Management, Introduction to Artificial Intelligence.  
Mathematics: Linear Algebra, Graph Theory, Theory of Probability, Cryptography, Differential Equations, Real Analysis

## Projects

**Harmony** Jan. 2019 to Current  
Fullstack React/Rails Discord Clone  
Optimized AJAX requests by automatically filtering results by user, reducing loading times  
Incorporated ActionCable websocket framework for real time text messaging  
Built specific design patterns used by the actual Discord to provide ease of integration for future features.

**A\* Pathfinder** Feb. 2019 to Current  
Javascript implementation of heuristic pathfinding algorithms in a discretized grid environment. Software generates randomized grid terrain (e.g: Civilization games maps) and start and goal vertices.  
User chooses one of various heuristic functions in the A\* search family to find a path between the vertices.  
Analyzed time/space complexity of each algorithm to provide comparison points.

**NJData** Dec. 2017  
Python Flask web application covering NJ presidential election voting history  
Covered various voting factors including gender, GDP, and population growth for detailed view of demographics.  
Predicted NJ county election results for 2016 based on sampled data, with 90% accuracy.

**Chess** Dec. 2016  
Android chess application implemented with Java and Android Studio.  
Uses java.io.Serializable interface for game recording, playback, and local storage.

## Education

**App Academy** Nov. 2018 to Feb. 2019  
Software Development  
1000 hour immersive software development course with focus on full stack web development

**Rutgers University** 2013 to 2018  
BA Mathematics  
Minor Computer Science  
Minor Music  
Completing part time

**Hong Kong University of Science and Technology** 2015  
Study abroad Summer  
Coursework in C, Python, and electro-robotic design

## Employment

**Medeo Fencing Club** New Jersey  
Fencing Coach, Asst./Head Coach for Willow Private School 2013 to 2016  
Maintained quality and standards set by previous head coach, a former NCAA champion and Jamaican national team member.  
Provided resources and direction for parents and students seeking improvement outside of school setting, in conjunction with local fencing club.

**US Air Force Parent's Association of New Jersey** Remote  
Web Administrator 2017 to Current  
<https://www.njafapa.org>  
Creator and administrator of NJAFA Parent's Association website  
Renovated and automated many features including signup, payment, and event organization (including ecommerce)  
Manage 200 users and communications with the official AFA parent's liaison