

# Grant Peterson

1999 Burdett Ave | Troy, NY | 12180  
gpeterson707@gmail.com | 434.270.2991 | peterg4.github.io

## EDUCATION

### RENSSELAER POLYTECHNIC INSTITUTE

#### BACHELOR OF SCIENCE

Graduation: May 2022 | Troy, NY  
Dual Major: Computer Science • Information Technology and Web Science  
Concentrations: Web Technologies • AI and Data  
Cum. GPA: 3.56 / 4.0

### DETROIT COUNTRY DAY

Grad. May 2018 | Detroit, MI

## COURSEWORK

**DATA STRUCTURES**  
**INTRO TO ALGORITHMS**  
**COMPUTER ORGANIZATION**  
**WEB SCIENCE SYSTEMS**  
**INTRO TO HCI**

## SKILLS

### TECHNICAL SKILLS

Proficient with:  
C/C++ • JavaScript(ES6) • AngularJS  
React • Node.js • MongoDB • HTML5  
CSS3 • REST APIs • SQL • Git

## WORK EXPERIENCE

### GALE CENGAGE LEARNING

#### WEB ACCESSIBILITY INTERN

Summer 2018 | Farmington Hills, MI

- Discovered and developed solutions for WCAG 2.0 non-compliances in Cengage databases using aXe and NVDA
- Created written reports on accessibility failures and potential solutions

### USERTESTING

#### USER TESTER

Fall 2018 - Fall 2019 | Troy, NY

- Analyzed Client's UI's from the perspective of a potential user
- Delivered oral walkthrough of products, followed by critiques and suggestions on how to improve the UX

## TECHNICAL PROJECTS

### AI LEARNS TO PLAY SNAKE | GITHUB | DEMO

Summer 2020

- Built application which trains an AI to play Snake with neural networks and a genetic algorithm
- Programmed the AI learning process with TensorFlow.js; used p5.js to create the game environment and data visualizations

### FLUX | GITHUB | DEMO

Summer 2020

- Built AngularJS voice controlled smart DJ for Spotify
- Leveraged wit.ai to process audio input and typed natural language into song recommendations and playback commands
- Interfaced directly with active Spotify devices to add songs to Spotify queue and change currently playing song

### READSY | GITHUB | DEMO

Spring 2020

- Built MEAN stack application for fostering reading in Immaculata Middle School Special Education classes, allowing users to upload their books, search for new books, and track the books they've read
- Includes admin view for teachers to vet and approve books and reviews

### JUKEBOX | GITHUB

Spring 2020

- Built MEAN stack application that uses multiple REST APIs to build custom playlists based on external factors such as weather and the stock market combined with 12 audio features included in Spotify's API, such as Tempo, Valence, etc...
- Allows users to view and listen to all playlists in their Spotify library, and includes data visualizations for their personalization statistics

### PATHFINDING VISUALIZER | GITHUB | DEMO

Spring 2020

- Built React application to visualize Dijkstra's and A\* path-finding algorithms
- Implemented recursive division maze generation algorithm and randomized Prim's maze generation algorithm

## OTHER INTERESTS

### MEDITERRANEAN CLUB

Spring 2020- Present

- Help plan meetings and organize fundraisers for the celebration of Mediterranean culture

### BLENDER

2018 - Present

- Creating 3D renders and animations of everyday objects