# **Katherine Shen**

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# **EDUCATION**

# **Georgia Institute of Technology**

Aug. 2020 – Expected May 2024

Bachelor of Science in Computer Science

Atlanta, GA

**Coursework**: Computer Organization, Applied Combinatorics, Objects & Design, Discrete Mathematics, Data Structures & Algorithms, Object-Oriented Programming, Linear Algebra

**River Hill High School** 

Sep. 2016 - May 2020

High School Diploma Clarksville, MD

**Rank**: 5 of 298

**SKILLS** 

**Languages** | Python, Java, JavaScript, HTML/CSS. **Technologies** | Websockets, API, Event Handling **Tools** | Figma, Notion, Trello, Git, Adobe Photoshop

### **EXPERIENCE**

# **Johns Hopkins University Applied Physics Lab**

Jun. 2018 - Jun. 2020

Computer Science ASPIRE Intern

Laurel, MD

- Reduced average time to locate a parking spot on APL campus by applying OpenCV and image recognition methods to analyze parking spaces dispatched to drivers via a mobile app
- Experimented with natural language processing developing a program to classify relationships between television subtitles and emotional context utilizing data analysis and NLP
- Developed a pseudo-GPS system with a Raspberry Pi to reduce time taken to find lost devices by tracking objects through local WiFi networks

#### **PROJECTS**

gamelettr | Python, Websockets, Event Handling, REST APIs

Jul. 2021

- Provides quick look-up to regional and global esports tournament information through a Discord bot
- Consumed lolesports API to get live data from Riot Games on tournament information; formatted by utilizing data structures sent to Discord using the discord.py library
- Developed a scheduler to deliver notifications with a stream link for upcoming matches for ease of viewing

**Energy Consumption Analysis** (2020 HackGT 7) | *Dash, Plotly.js, Pandas, numpy* 

Oct. 2020

- Contributed to a decision tree anomaly detection model built to detect energy usage anomalies
- Visualized data output by from decision tree using Plotly graphs and a Dash app

#### **EXTRACURRICULARS**

GT Esports Sept. 2020 – Present

Vice President, Head of Creative Department, Treasurer

Atlanta, GA

- Reorganized organization structure by interviewing and onboarding new staff, creating new procedures, and promoting member engagement
- Led a team of seven people creating website and social media designs; created graphics on an ad-hoc basis for large organization hosted events
- Managed budget and allocated funds for competitive teams, various events, and organization costs