

# Homer Walke

## EDUCATION

**Brown University** - Sc.B in Computer Science

Providence, RI | Anticipated Graduation: May 2021

- GPA: 3.94/4.0
- Relevant coursework: Artificial Intelligence, Deep Learning, Algorithms, Theory of Computation, Multivariable Calculus, Discrete Structures and Probability, Probabilistic Methods in CS, Statistical Inference, Linear Algebra

**Decatur High School**

Decatur, GA | Graduated May 2017

- Received International Baccalaureate Diploma
- GPA: 4.7/4.0

## EXPERIENCE

**Machine Learning Undergraduate Research**

January 2019 - Present

- Collaborated with Professor Michael Littman on various machine learning research topics including:
  - Smart home automation
  - PAC learning of linear temporal logic formulas

**Teaching Assistant in Brown CS Department**

September 2018 - December 2018

- Helped run CS 17, one of Brown's intro computer science courses
- Held TA hours to assist students in understanding course material
- Designed problems for assignments, graded student work, and directed interactive labs

**Internship with Emory University Sociology Department**

June 2018 - August 2018

- Developed a mobile app for the 2018 International Society for Justice Research Conference
- Handled departmental administrative tasks

**Internship with Georgia State University History Department**

May 2016 - July 2016

- Developed a prototype of a history textbook that uses virtual reality
- Utilized the Unity 3D Engine and C# scripting
- Assisted with the development of online course software using HTML, JavaScript, and PHP

**Open Hand Atlanta**

May 2013 - August 2017

- Volunteered to pack and deliver meals to low income men, women, and children who are homebound with critical, chronic, or terminal diseases

## SKILLS AND INTERESTS

- Proficient in Java, Python, HTML, JavaScript, OCaml, Scheme
- Experience with data structures, algorithms, machine learning, complexity classes, reductions
- Conversational Spanish
- Interests: artificial intelligence, quantum computing, cryptocurrency
- Activities: Brown University Band (general manager), Brown Outdoor Leadership Training

## RELEVANT PROJECTS

- Created a hidden Markov model to filter noisy touchscreen data
- Designed reinforcement learning algorithms to complete tasks in the Gym OpenAI toolkit
- Developed a mobile iOS app for the iPhone/iPad App Store

## HONORS AND AWARDS

- National Merit Scholar Finalist