

## Education

**Washington University in St. Louis, MO**

**Aug 2019 – Present**

• **Declared Program:**

- Bachelor of Science in **Computer Science**
- Second Major in **Mathematics**

• **Expected Graduation:** Spring 2023

• **GPA:** 4.0 / 4.0

• **Credits Earned:** 146 / 120

• **Notable Courses**

- **Computer Science:** *Algorithm Analysis, Frontend / Backend, Objective Oriented, Computer Systems, (Graduate) Machine Learning, Theoretical Artificial Intelligence, Nonlinear Optimization, Bayesian Optimization, Quantum Computing*
- **Mathematics:** *(Graduate) Algebra, (Graduate) Complex Analysis, Topology, Measure Theory, Lie Groups, Statistics & Probability*

## Skills and Proficiency

**Natural Languages:** Native speaker of *Chinese*; proficient in *English*

**Programming Languages:** proficient in *C++, Python, Java, JavaScript, html, R, Matlab, LaTeX, Assembly*

**Libraries / Frameworks:** proficient *NumPy, PyTorch, Mosek, Sedumi*

## Employment

**(Incoming) Software Engineer Intern, Google, Mountain View**

**May 2022 – Aug 2022**

**Engineering Teaching Assistant & Engineering Tutor**

**Jan 2020 – Present**

## Personal Project

**Leading Developer & Founding Member, Wall Street Connect** ([www.wallstreetconnect.org](http://www.wallstreetconnect.org))

**Feb 2021 – Present**

- Proposed a service that helps job applicants network via email automation
- Constructed a LinkedIn scraper using python Selenium that collected over 100,000 public profiles
- Integrated dynamic Javascript UI from Wix with backend Apache server from AWS EC2

**Full-stack Developer & Founding Member, Indream Online Recruitment Platform**

**Jun 2020 – Nov 2020**

- Designed and implemented an interview-based application with a recommendation system that matches recruiters and student users with maximal suitability, and connects student users with similarity
- Maintained NoSQL databases, Javascript APIs, and html frontend UI under the WeChat Miniapp framework
- The project continued as Peer with 10,000 active users and \$200,000 in angel round funding by September 2021

**Developer, Jiangsu WebAce Innovation Center** ([www.webace-i3c.com](http://www.webace-i3c.com))

**Jul 2019 – Aug 2019**

- Gathered data and trained a naïve Bayes classifier and a random forest to classify verbal queries about movie information that are managed in a neo4j knowledge graph database
- Developed higher level voice detection and query processing APIs on NAO robots using python and Baidu cloud service
- Synthesized a system for detecting and answering voice inquiries for further real-world usage

**Dare Mighty Things Hackathon**

**Oct 2019 – Oct 2019**

- Combined fast Fourier transform with k-means for audio pitch separation and inverse FFT for smoothing sound waves
- Showcased frontend and backend developing skills in a team of four by finalizing an audio visualization project

## Research Experience

**Machine Learning Research at Washington University**

**Jun 2020 – Present**

- Developed a machine learning algorithm for shape segmentation using polynomial invariants learning
- Proved the correctness of the algorithm within the sum-of-square framework under the supervision of Dr. Brendan Juba

**Freiwald Scholarships Program at Washington University, Mathematics Department**

**Feb 2021 – Aug 2021**

- Utilized abstract algebra and representation theory to research the algebraic invariant theory of polynomial coefficients
- Simplified and improved the online learning framework in the aforementioned shape segmentation problem

## Clubs and Extracurriculars

**Executive & Competitive Programming Coach, WUSTL Association of Computing Machinery**

**Sep 2019 – Present**

- Qualified top 3 for WUSTL ICPC team, finished top 12 (2019) and top 7 (2020) in Mid-Central Programming Contest
- Held weekly competitive programming training seminars and managed repository for more than 10 students
- Organized recruiting events and Coding Jams for students on campus

**Athlete, WUSTL Table Tennis Club**

**Sep 2019 – Present**

- Trained twice a week on competitive table tennis skills and techniques
- Participated in the Divisional Competition held by National Collegiate Table Tennis Association

## Honors and Awards

**Valedictorian, Washington University Class of 2022**

**2022**

**Dean's List, McKelvey School of Engineering (WUSTL)**

**2020, 2021, 2022**

**Lifetime Member, Tau Beta Pi Engineering Honor Society**

**2021**

**Top 6 (out of 80), Mid-Central USA Regional Programming Contest**

**2022**

**Top 150 (out of 3000), William Lowell Putnam Mathematical Competition**

**2021**