

TONGXU (TONY) BAI

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OBJECTIVE

Dedicated undergraduate engineering student in computer science with a robust background in mathematics seeking a 2020 internship.

EXPERIENCE

Software Development Engineer Intern

Amazon.com, Inc., Seattle, WA

May 2019 - July 2019

- Worked on the Community Shopping team in the Consumer Organization for 12 weeks.
- Developed a service which surfaces recommendation widgets on product detail pages with our custom strategy and renders them.
- Widget linked users to content found on Amazon #FoundItOnAmazon/Amazon Spark which has 1,000,000+ weekly active users.
- Gained experience with code reviews, version control, and Amazon's DevOps tools, as well as specific technologies listed below.

EDUCATION

University of Michigan, Ann Arbor, MI

GPA: 3.81

Bachelor of Science in Engineering in Computer Science and Data Science

September 2018 - May 2021

Minor in Honors Mathematics

COURSEWORK

<i>EECS</i>	A+ in Data Structures and Algorithms (281), Computer Organization (370), Foundations of Computer Science (376)
<i>MATH</i>	Honors Analysis I (395), Combinatorics (465), Probability (525)
<i>This Year</i>	Advanced and Object-Oriented Programming (EECS 381), Advanced Cryptography (EECS 575), Honors Algebra I (MATH 465), Operating Systems (EECS 482), Web Development (EECS 485)

SKILLS

Worked with in Professional Capacity: Java, C++, HTML/CSS, Handlebars, Git, Bash, Guice, AWS ElasticSearch, Kibana, EC2

Mathematics: Proof-writing, competition math, linear algebra

Extracurricular: Piano performance, bassoon, direct sales, medical research

Languages: English (native proficiency), Chinese (native proficiency in speaking and listening), German (basic proficiency)

PUBLICATIONS & PROJECTS

Large-scale identification of human cerebrovascular proteins: Inter-tissue and intracerebral vascular protein diversity.

<https://www.ncbi.nlm.nih.gov/pubmed/29190776>.

PLOS One Journal, November 30, 2017

Chess Bot. Challenge it if you dare!

https://lichess.org/@/FlamingDragon_9000

Implemented the Stockfish 9 chess bot on the Lichess website and deployed it to a Heroku server to run by itself 24/7.

Puppet Show Soundboard

https://github.com/tonyb7/fsbmp_sounds

Created a soundboard to streamline the audio-playing system for the puppet show of my church's Freshman Spring Break Missions Project, which we planned to present to the kids at Englewood Family Outreach in the Englewood neighborhood of Chicago.

HONORS & AWARDS

- Two-time National AP Scholar
- National Merit Finalist
- U.S. Presidential Scholar Nominee
- Michigan Mathematics Prize Competition Top 20
- Two-time AIME qualifier