Justin Bi

justin-bi.github.io/ | justinbi@princeton.edu | linkedin.com/in/justinbi/ | 609-721-2588

Dedicated and ambitious undergraduate with extensive programming and development experience, interested in machine learning and web development; seeking a full-time position.

EDUCATION

Princeton University   Class of 2022
- **Computer Science Major** (GPA: 3.94/4.00)
- **Academic Highlights:** Natural Language Processing, Intro to Machine Learning, Economics and Computing, Computer Architecture and Organization, Principles of Computer System Design, Fundamentals of Statistics, Computer Graphics, Intro to Data Science

SKILLS

- **Programming Languages:** Python, Javascript, Java, C, C++, R, Golang
- **Development Tools:** React, Flask, HTML, CSS, SQL, Postman, Git, JIRA, Jest, Cypress
- **Miscellaneous:** Hardware, circuits, video/audio/image editing

WORK EXPERIENCE

Capital One — McLean, VA   Jun 2021 - Aug 2021
Software Engineer Intern
- Built a React app for the Secured Card Deposit Portal to reduce the portal's drop-off rate
- Implemented UX testing feedback to design new features for a better customer experience
- Utilized tools including Jest, Storybook, Cypress, and Jenkins to achieve effective and efficient workflow

Principal Financial Group — Des Moines, IA   Jun 2020 - Aug 2020
Software Engineer Intern
- Implemented Elastic Stack project, created pipeline to parse, filter, store, and visualize logs
- Completed reusable Informatica Powercenter Designer pipeline to transfer mass client data
- Built a chatbot using AWS with a group of interns during weeklong Intern Code Jam

Princeton University — Princeton, NJ   Sep 2019 - Present
Computer Science Lab TA and Grader
- Serve as Admin TA since 2020, in charge of tracking attendance and scheduling for 60+ TAs
- Provide in-person help and instruction to Systems and Algorithms students on assignments
- Grade and provide informative feedback to students for 70+ Systems course assignments

Code Ninjas — Princeton, NJ   Feb 2019 - Jan 2020
Lead Coding Instructor
- Tutored children and teens in Javascript, robotics, and game development
- Led two summer camps, both instructing groups of 20+ kids about coding and website building
- Trained incoming instructors on the responsibilities and procedures of the work environment

PROJECTS

- Implemented six degrees of separation and a teammate finder on self-made graph of NFL players (link)
- Built musicology site which simplifies code complexity for non-programmers, used D3.js for visuals (link)
- Created 3D Breakout game with own custom physics code using Three.js (link)
- Researched shift-reduce parser combined with ELMo to improve discontinuous NER accuracy
- Developed an interactive Linux shell in C utilizing system calls, lexical/syntactic analyzers, and ADTs
- Completed many academic projects involving machine learning, data structures, and algorithms

ACTIVITIES

Princeton University Music Groups   Sep 2018 - Present
- Perform as lead Trombonist in Orchestra and Triangle Musical Club, did multiple national tours
- Create instruments in Javascript and perform electronic compositions for Princeton Laptop Orchestra

ADDITIONAL DETAILS

- **Awards:** Shapiro Prize for Academic Excellence
- **Interests:** Music, composition, tutoring, film/video making, chess