CHRISTIAN SUN

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Education

University of Pennsylvania, School of Engineering & Applied Sciences — *Philadelphia, PA*

Bachelor of Science in Engineering in Computer Science | GPA: 3.95/4.0 | ACT: 36/36 — *May 2024*

- **Minor:** Mathematics
- **Computer Science Coursework**: Discrete Mathematics, Data Structures & Algorithms, Big Data Analytics, Programming Languages & Techniques
- **Other Coursework**: Multivariable Calculus, Linear Algebra & Differential Equations, Physics (Mechanics), Engineering Electromagnetics

Technical Skills

Languages Python, Java, HTML & CSS, Javascript, C++, OCaml, SQL, LaTeX

Frameworks PyTorch, Apache Spark, AWS, React, Redux, Node.js, Swing

Experience

Macmillan Learning — *Austin, TX*

Software Engineering Intern — *May 2021 - August 2021*

- Assembled an analytics page and did full-stack development using React-Redux, Node.js, Javascript, Postgres/SQL, and HTML & CSS
- Collaborated in a professional environment with the Agile Scrum methodology

University of Pennsylvania Computer Science Department — *Philadelphia, PA*

Teaching Assistant — *January 2021 - Present*

- Instructed 15+ students during weekly recitations, graded assignments, and held weekly office hours
- Class covered discrete mathematics, such as set theory, combinatorics, probability, graph theory, proof techniques, & more

Johns Hopkins University Applied Physics Laboratory — *Laurel, MD*

ASPIRE Intern — *Summers 2018 & 2019*

- Designed agent-based models in Python to investigate the limits and capabilities of current social science modeling techniques
- Built a machine learning model to identify damaged buildings in satellite imagery using Python and the PyTorch deep learning library

Projects

Lezeat

- Developed an app that allows users to easily find friends who want to grab a meal that day
- Integrated Google Maps API to search for nearby restaurants and provide information to users
- Prototype UI designed in Figma, then coded in Java (Android) and Swift (iOS)

Chess AI

- Engineered a chess AI using the minimax algorithm, and implemented alpha-beta pruning to accelerate move selection
- Programmed the game logic and board GUI in Python using the PyGame library

Deposit Predictions

- Performed EDA and feature engineering to predict whether or not targets of a telemarketing campaign would make a deposit at a bank
- Implemented a variety of classification models, including Logistic Regression, Random Forest, XGBoost, K-Nearest Neighbors, Neural Networks, and more

Extracurricular Activities

Review for Relief — *Online*

Essay Editor — *July 2020 - April 2021*

- Evaluated high school seniors' college application essays to raise over $10,000 for COVID-19 relief charities

Other Skills and Interests

Other Skills Teamwork, Cooperation, Leadership, Communication, Problem Solving

Interests Roller Coasters (I have ridden 127 coasters and counting), Music (I play bass clarinet), Keyboards