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## Education

**University of Pennsylvania** — School of Engineering & Applied Science **Bachelor of Science in Engineering** (BSE) in **Computer Science** 

Philadelphia, PA December 2022

o Minors: Statistics [Wharton] & Engineering Entrepreneurship

3.83/4.00

o <u>Coursework</u>: Internet & Distributed Web Systems, Networked Systems, Machine Learning, Algorithms, Databases, Advanced Functional Programming, Big Data Analytics, Software Engineering, Computer Graphics, Computer Architecture, Probability, Statistical Inference, Time Series Analysis, Bayesian Statistics

## **Professional Experience**

Tesla, <u>Incoming Software Engineer Intern</u>, Palo Alto, CA

Fall 2021

o Software Energy Team

Akuna Capital, Quantitative Developer Intern, Chicago, IL

June 2021 - Present

o Market Microstructure Team

LinkedIn, UI Engineer Intern, Sunnyvale, CA

May 2020 – August 2020

- o Led the frontend implementation of a new insight card feature on LinkedIn's Sales Navigator homepage
- o Aimed to drive deeper user engagement on the homepage by providing insightful and actionable information to the user
- o Ember.js, JavaScript

CIS 197 (JavaScript), Teaching Assistant, Philadelphia, PA (seas.upenn.edu/~cis197)

August 2020 – May 2021

- o Student taught mini-course focused on teaching modern JavaScript; Covers Node.js, Express, React, Redux, MongoDB, and server-side rendering
- o Host weekly office hours, develop and refactor homeworks, and grade JavaScript programming assignments

CIS 502 (Analysis of Algorithms), Teaching Assistant, Philadelphia, PA

January 2020 - May 2020

- o Graduate level algorithms course of 120 students; covers greedy algorithms, dynamic programming, graph traversals, max flow, NP-completeness, and approximation algorithms
- o Hosted weekly office hours; graded homeworks and exams

Multifamily Asset Managers, Software Engineer Intern, Bethesda, MD

May 2019 – August 2019

- o Architected multiple property management pages along with a CRUD REST API in React and .NET
- o Created an advanced form builder component in React, greatly increasing development speed and maintainability
- o React, JavaScript, .NET, C#, MSSQL

University of Pennsylvania, Web Developer, Philadelphia, PA (pathways.history.upenn.edu)

April 2019 – January 2020

- o Developed and designed an interactive course selection web app called "Pathways" for Penn's History Department
- o Worked with another developer to build out functionality, including a Pinterest style layout and a course visualization network
- o React, Redux, JavaScript

## Projects

**TCP Chat Server** (Haskell, Brick) | (aithub.com/andyxiao1/tcp-chat-server)

- o Slack-like chat server with rooms and threads built from the socket level using concurrent threads in Haskell
- o Utilized the STM monad with transactional channels and variables to share data and communicate across server threads
- o Abstracted pure functions away from IO to effectively test and created a client-side terminal UI with Brick

**Shared Paper** (React Native, Node.js, Socket.io, MongoDB) | (github.com/andyxiao1/shared-paper)

- o Shared Paper is a note taking app developed at Bitcamp 2019 which allows multiple users to take notes together in real time
- o Architected entire React Native mobile app with full featured drawing canvas, user sign-up/login, and document sharing
- o Spearheaded group of 4 developers to integrate mobile app with backend, using Socket.io for real time updates

**Penn Course Scheduler** (React, Node.js, Express) | (github.com/andyxiao1/penn-course-scheduler)

- o Penn Course Scheduler is web app that allows Penn students to see all possible schedules for the courses they want to take
- o Implemented an API to perform a DFS traversal and return all valid schedules and created a UI to search and show schedules

## Skills

- o Languages: JavaScript, Python, Java, C++, Haskell, R, C#, HTML/CSS
- o Technologies: React, Ember.js, Node.js, Flask, .NET, Pandas, Spark, MongoDB, SQL, Git