# **Patrick Wang**

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#### **EDUCATION**

## University of California, Berkeley

Bachelor of Science in Electrical Engineering and Computer Science

May 2024

**GPA:** 4.0/4.0

Relevant Coursework: Data Structures, Discrete Math & Probability, Computer Architecture, Efficient Algorithms, Intro to Artificial Intelligence, Operating Systems & System Programming, Intro to Databases, Principles of Data Science

### PROFESSIONAL EXPERIENCE

Riot Games

Los Angeles, CA

Software Engineer Intern

May 2022 – Aug 2022

- Created GitOps with complete CI/CD pipeline for BigPanda alert configurations allowing for cross-team collaboration between hundreds of employees and protection against breaking changes using Python, Docker, Groovy, and Jenkins
- Expanded API client and fixed sub-optimal software engineering practices in existing codebases
- Developed Slackbot allowing for executives to easily access service health dashboards and analytics using Go

Amazon
Software Development Intern

San Francisco, CA

Feb 2022 - May 2022

- Contributed to the payment service for Amazon Music's royalty payments to labels and producers
- Optimized config and mapping loading times for the payment service, reducing execution times by over 90% and increasing service reliability against failures in various AWS services with Python, Java, Guice, S3, DynamoDB, Lambda
- Automated adjustment payments for minimum revenue contracts, handling payments of up to \$10 million to labels

Hatch Seattle, WA

Software Engineer Intern

May 2021 - Aug 2021

- Contributed to an incubator and forum for startups, allowing for convenient idea validation, user feedback, and advanced customer metrics using NextJS, AWS CDK, EC2, S3, DynamoDB, RDS, Lambda, and SQS
- Created high priority features necessary for the product, such as user preferences, feedback requests, notification systems, chat systems, and customer engagement rankings

## University of California, Berkeley

Berkeley, CA

Undergraduate Student Instructor

Jun 2021 - Present

- Lead discussions of more than 50 students in the introductory computer science course at Berkeley, receiving outstanding course evaluations
- Focus area on software, developing website, office hour queues, section tools, and more for almost 2000 students each semester using React, Flask, MySQL, and Google Cloud

#### PROJECTS

Launchpad

## ShallowSleep - Sleep Stage Classification

Jan 2021 – May 2021

- Predicted people's sleep stages using only radio waves, compared to traditional and costly sleep studies
- Developed a machine learning model with an adversarial architecture using LSTMs and CNNs, along with a website to visualize predictions and statistics using Pytorch, ReactJS, and Firebase

**PathViz** – Pathfinding Visualizer

Jan 2021 – May 2021

Developed a pathfinding visualizer to help students understand the search process of algorithms such as A\* and Dijkstra's using ReactJS, Javascript, HTML, and CSS

**Inflection** – Voice Personalization

Jan 2021 – May 2021

 Voice conversion for personalizing chatbots to speak in any speaker's voice with machine learning and signal processing using Python, Pytorch, AWS Lex, Polly, Transcribe

#### LEADERSHIP AND EXTRACURRICULAR EXPERIENCE

VP of Marketing, Head of Education, Web developer

Berkeley, CA

Jan 2021 - Present

- Member of Launchpad, a Citadel and IMC sponsored machine learning club
- Design education curriculum for new members, and organize logistics for club recruiting for hundreds of applicants
- Work on projects in a variety of machine learning disciplines and develop new features for the club's website for thousands
  of users with Django

#### SKILLS AND LANGUAGES

Languages: Java, Python, Go, JavaScript, HTML/CSS, SQL, C, Rust, LISP

Technologies: TensorFlow, ReactJS, NextJS, AWS, NodeJS, Firebase, Jenkins, Docker, Flask, Django, Google Cloud