Andy Ngo

ango9031@berkelev.edu | linkedin.com/in/andytngo | github.com/xandyngox | 916-342-7090

EDUCATION

University of California, Berkeley, B.A. in Computer Science, GPA 3.6

Graduation Date: May 2024

- Web Development at Berkeley Developer and Designer, Intro to Full-Stack Development Course Staff and Developer
- Relevant Coursework: Machine Learning, Discrete Mathematics and Probability Theory, Data Structures and Algorithms, Computer Architecture, The Structure of Computer Programs, Designing Information Devices and Systems I & II

PROFESSIONAL EXPERIENCE

Software Engineer Intern, Amazon (AWS Business Intelligence)

May 2023 - August 2023

- Implemented pixel-based font sizes in AWS Quicksight dashboards, improving customizability for over 100K users
- Developed **React** components used in over 20 chart visualizations and designed persistent **back-end** infrastructure
- Re-architected unit tests in **Typescript** to use shallow rendering, speeding up build time by 80% for several packages

Software Engineer Intern, Intel (NAND Verification)

May 2022 - October 2022

- Automated **NAND Verification** testing scripts, resulting in a 50% increase in production speed and team efficiency
- Created a test generator using **Pandas** to generate various wordline pattern sequences, increasing test coverage by 60%
- Developed automated scripts in Python to upload codebase data onto Intel wiki page, benefitting over 100K employees

Software Engineer Intern, Amazon (AWS Artificial Intelligence)

Jan 2022 - April 2022

- Connected AWS Cloudwatch metrics as a utilizable data source for over 10 machine learning model training workflows
- Automated machine learning model retraining using Python and AWS Lambda in CI/CD pipeline with ~100% uptime
- Implemented resource tagging system with **Kotlin** to organize training/retraining workflows with over 20 resources

Front-End Developer Intern, Nomad (Accommodation Marketplace Start-Up)

October 2020 - Jan 2021

- Redesigned website with interactive CSS animations and device-responsive components using Material UI library
- Developed user-facing reservation form with dynamic calendar component in **React**, utilized in over 15 home listings
- Created style guide and UI/UX Figma Prototypes to promote consistent design language and unify team development

SOFTWARE PROJECTS

Proximity-Based Social Media Platform

October 2022 - December 2022

- Developed a Full-Stack web application with Node.js and Express serving a REST API and React as the front-end
- Implemented Google Maps geocoding API with live map updates that respond to user input and location data
- Architected responsive social media timeline that posts and sends notifications to users within a selected proximity

Gitlet Version Control System

October 2021 - November 2021

- Developed Java-based version control system including features such as file tracking, additions, commits, logs, branches
- Coded remote functionalities comprised of pushing, pulling, and fetching operations between remote repositories
- Integrated an intuitive command-line interface with additional flag support, enhancing user experience and accessibility

2D Tile Platformer Game

September 2021 - October 2021

- Developed tile-based video game using Java with keyboard input controls, frame handling, and interactive menu UI/UX
- Integrated seed-based generation into map including pseudo randomly generated rooms, hallways, enemies, and coins
- Engineered intelligent enemy tracking with A-Star pathfinding algorithm to increase game complexity and engagement

TECHNICAL SKILLS

Languages: Python, Java, Javascript/HTML/CSS, Typescript, Kotlin, C, SQL, Ruby

Frameworks and Libraries: React.js, Node.js, Express, MongoDB, Material UI, Pandas, Ruby on Rails Tools: Git, AWS (S3, Cloudwatch, Quicksight, Lambda, EC2), IntelliJ, Figma, VS Code, Linux, Docker

HOBBIES / INTERESTS

Hackathons, Graphic Design, Music Production, Marathons, Bouldering, Guitar, Cooking, Lifting, Anime, Kite-Flying, Fashion