

David Zhan

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EDUCATION

University of Pennsylvania, Philadelphia, PA May 2026
Candidate for BSE in Computer Science GPA: 4.0/4.0

- Coursework:** Programming, Discrete Math, Data Structures and Algorithms, Data Systems*, Computer Systems*, Machine Learning/AI*, Data Analysis*, Game Theory ***Graduate**

EXPERIENCE

Software Engineering Intern June – August 2024
Ventoscity LLC College Park, MD

- Redesigned full stack mobile app using Flutter for cross platform development
- Integrated food scanning and analysis powered by GPT-4 to determine portions and fiber content.
- Conducted user testing with over 50 external testers, gathering and implementing feedback to improve app performance and user satisfaction.

Product Management Intern March – May 2024
keep.id Philadelphia, PA

- Overhauled the PDF uploader feature, leading to a 60% reduction in user-reported issues and significantly improving the document management process.
- Developed responsive UI framework, optimizing interface layouts across various screen sizes.

Research Intern June – August 2023
National Research Foundation College Park, MD

- Developed a Swift-based mobile app designed to integrate with an emerging gut health start-up at UMD.
- The app demonstration was pivotal in securing over \$1 million in VC funding over the next 3 months

Mobile Developer January – Dec 2023
The Daily Pennsylvanian Philadelphia, PA

- Implemented interstitial ads using React Native and Google AdMob to monetize app loading screens
- Boosted DP+ mobile app revenue by over 30% during the ad campaign.

PROJECTS

Ngram POS Tagger | *Python, scikit-learn, pytorch* October 2024

- Hidden Markov Model-based POS tagger implementation
- Incorporated Greedy, Beam Search, and Viterbi inference methods
- Trained on Penn Treebank from WSJ; achieved **96.2% accuracy** on randomized test set

Blip | *Next.js, TypeScript, Tailwind, Clerk, Convex* September 2024

- Short form audio platform which encourages micro-learning during transition times
- Leveraged Cerebras and OpenAI API to aid user content generation
- Uses custom recommendation engine to engage and retain users
- PennApps XXV: Best Entertainment Hack**

DavidDocs | *Next.js, TypeScript, Tailwind, liveblocks* June 2024

- Real time collaboration system designed to streamline team productivity and document management
- Implemented **live commenting and integrated push notifications**, increasing **user interaction** by over 50%.

LEADERSHIP

Multivariable Calculus TA | *Teaching Assistant*, Philadelphia, PA August 2023 – Present

- Hold weekly recitations and office hours for students in Math 1410

SKILLS

Languages: Python, Java, SQL, C / C++, Swift, Dart, JavaScript
Framework: React, Node.js, Next.js, TailwindCSS, TypeScript, Three.js, Bootstrap, Flutter
Libraries: pandas, NumPy, Matplotlib, scikit-learn, TensorFlow, PyTorch, OpenCV

