

ANLON ZHU

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EDUCATION

Princeton University | B.S.E Computer Science, Certificate in Robotics (GPA: 3.9) **Aug. 2021 – Present**

- *Relevant Coursework:* Algorithms & Data Structures; Programming Systems; Computer Architecture; System Design; Advanced Graph Algorithms; Machine Learning; Generative AI; Computer Graphics; Blockchains; Functional Programming; Discrete Math
- *Honors and Awards:* Shapiro Prize for Academic Excellence

Oxford University, Worcester College | Computer Science | Visiting Student Programme **Jan. 2024 – Jun. 2024**

- *Relevant Coursework:* Artificial Intelligence, Computer Vision, Computational Game Theory, Data Visualization

SKILLS

Programming Languages: Python, Java, C, C++, GO, Rust, JavaScript, TypeScript, SQL, OCaml, PHP, HTML, CSS, R, Solidity

Notable Tech & Frameworks: React, Node, Vue, Symfony, Django, Flask, Jinja, Docker, AWS/LocalStack, Azure, GraphQL, MariaDB, PostgreSQL, MySQL, Neo4j, Redis, PyTorch, Pandas, Postman, HyperV, Blender

PROFESSIONAL EXPERIENCE

Software Engineer Intern | Microsoft | Redmond, Washington | C++, PyTorch **Jun. 2024 – Aug. 2024**

- Designed, built, and evaluated novel GPT-based AI architecture to detect anomalies and streamline debugging for CoreOS media logs
- Exceeded initial project goals in 60% of the expected timeline. Used product for bug triage by processing 1M+ logs in daily debugging tasks

Full-Stack Engineer Intern | Weavegrid | San Francisco, CA | React, Flask, Python, GraphQL, MariaDB, AWS **Jun. 2023 – Aug. 2023**

- Designed and developed TaskQ, a full-stack workflow management system for climate-tech startup. Resolved critical roadblock challenges in system maintenance, redirecting 100+ weekly alerts from Slack to TaskQ and creating actionable tasks via Jira API integrations.
- Wrote a 20-pg design document, aligning the visions of company-wide stakeholders and presenting schema/API to board of engineers

Back-End Engineer Intern | Chess.com | Remote | PHP, Symfony, JavaScript, Vue, MySQL, Redis **Jan. 2023 – Apr. 2023**

- Designed and developed a full-stack admin interface for marketing staff to deploy advertisements under grouped marketing campaigns.
- Expanded backend support for site-wide marketing banners to engage audiences, increasing clickthrough rate from 7% to 15%.
- Refactored recommendation system to reduce database queries by using Redis and a new API, supporting site's scaling of 100M+ users.

Researcher, Data Science | Bren School of Environmental Science | Santa Barbara, CA | R **May 2021 – Sept. 2021**

- Quantified the renewable energy potentials of 190 countries across the globe. Optimized allocation algorithm, reducing runtime by 96%.
- Projected the levelized cost of electricity and burden of each renewable energy technology and presented findings in complete manuscript.

Analyst Intern | Ecomotion | Los Angeles, CA | Python **Jun. 2019 – Jun. 2020**

- Programmed a data-parsing Python algorithm to analyze 20 years of energy and water data to inform the Murrieta Valley School District's strategic energy plan, reaching 24,000+ students and teachers. Reduced project timeline by 50% via programmatic approach.

PROJECTS

Physics in Infinigen for 3D Computer Vision | Princeton Vision Lab, Thesis **Jun. 2024 – Present**

- Designing CNN-based model for determining physical parameters (e.g. mass, density, friction) from computer vision
- Built a dataset of physics-based ground truths for 3D synthetic data generated by Infinigen in Blender. Mentorship of Professor Jia Deng

Text-to-Video Editing Diffusion Model (FateZero UBW) | Princeton Computational Imaging Lab **Sept. 2023 – Jan. 2024**

- Introduced hyperparameters for a 15% improvement in an AI model's accuracy in text-to-video-editing. Focused on smoothing the attention-based blending of the FateZero diffusion model. Mentorship of Professor Felix Heide.

AlexNet-Similarity Cache **Sept. 2023 – Dec. 2023**

- Implementation of an image-similarity cache strategy for accelerating training of the AlexNet image classification CNN on 50k images.

Workwell Database **Feb. 2023 – May. 2023**

- Led a team of 4 in developing a full-stack Django application for WorkWell, a NJ nonprofit that aids formerly incarcerated citizens. Our app facilitated data entry, enabled long-term demographics tracking, and protected data via authentication-based permissions.

Ingreedient **Jan. 2024 – Mar. 2024**

- Personal project full-stack app for generating/visualizing a food graph with 35k+ nodes. Built on React, Neo4j, & NLP algorithms.

LEADERSHIP AND EXTRACURRICULARS

Princeton Undergraduate Capital Partners | Managing Director, Principal **Oct. 2022 – Present**

- Led three 5-analyst teams in market sizing & startup valuation for a mobility-tech VC and proposing investments for an international client

HackPrinceton | E-Club | Partnerships Lead **Jul. 2022 – May 2023**