

# Ryan Dang

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<https://portfolio-website-ryan-dang.vercel.app/>

## Education

### The Pennsylvania State University – University Park, PA

May 2024

*Bachelor of Science | Double Major: Computer Science, Statistics*

- **Major Related Courses (Computer Science):** Object-Oriented Programming, Web Development, Unix System Programming, Data Structures and Algorithms, Machine Learning, Database Management
- **Major Related Courses (Statistics):** Probability Theory, Mathematical Statistics, Stochastic Modeling, Applied Non-Parametric Statistics, Statistical Modeling
- **GPA:** 3.93
- **Awards:** Statistics Student Marshall, Dean's List, Magna Cum Laude

## Work Experience

### Information Technology Support Specialist Intern

May 2023 – Present

*Applied Research Laboratory at Penn State*

- Resolved technical issues for **50+** users per week by providing timely and effective support enhancing user productivity
- Managed Active Directory for organization, overseeing user account management for **500+** employees resulting in a **50%** decrease in login issues.
- Updated **100+** articles within the Knowledge Base system, resulting a **20%** decrease in resolution time for customer inquiries.
- Utilized JavaScript to create custom macros for Confluence, streamlining document functionality processes by **30%**.

### Statistics Teaching Assistant

Aug. 2022 – Present

*The Pennsylvania State University*

- Reviewed and critiqued **100+** student labs per week, providing actionable insights that boosted assignment quality by **25%**
- Organized review sessions before major exams, resulting in a **20%** increase in overall class performance.
- Collaborated with professor to develop interactive lesson plans and activities, resulting in a **20%** increase in participation.
- Provided personalized feedback to students on assignments, leading to a **20%** decrease in errors and an overall improvement in understanding concepts.

## Projects

### Minting Audio NFTs

- Developed and implemented a **Solidity** smart contract for minting audio NFTs on the **Ethereum** blockchain
- Integrated decentralized storage solutions using **ThirdWeb** to securely store audio files associated with minted NFTs
- Implemented a frontend interface for the audio NFT minting platform using **React.js**, making it easier for users to mint NFTs
- Utilized **MetaMask** for seamless integration with Ethereum wallets, allowing users to interact with the blockchain directly
- Created a functionality to fetch minted NFTs using blockchain queries, allowing users to verify the existence of their NFTs

### Clothing Classification

- Created a deep learning model using **TensorFlow** to classify image datasets of articles of clothing, achieving a **93%** accuracy
- Integrated **Recurrent Neural Networks** and **Convolutional Neural Networks** into the model using **Keras** and **TensorFlow**.
- Enhanced model performance by incorporating dynamic learning rate schedules, reducing training time by **25%**
- Included data augmentation strategies, resulting in a **20%** improvement of the model's ability to handle variations in input data.
- Conducted model evaluation using metrics such as precision, recall, and F1-score to help improve the model's accuracy.

## Technical Skills

**Programming Languages:** Python, C, SQL, Solidity, Java, JavaScript, HTML/CSS, R

**Software/Tools:** R-Studio, Active Directory, Firebase Authentication, Jira, Confluence, Bitbucket, MetaMask, ThirdWeb

**Frameworks/Libraries:** TensorFlow, Node.js, Next.js, React.js, Keras, PySpark, PyTorch, Numpy, Pandas