Streator, IL

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Education

BSE Computer Science — **Princeton University** — **Fall 2021 – May 2025**

- **GPA**: 3.55; Certificates in Statistics/Machine Learning and Applied Mathematics.
- **Activities**: Residential College Advisor, Quiz Bowl, Table Tennis Club, Daily Princetonian Copy Editor.

Employment

COS126 Lab TA — **Princeton University** — **Fall 2022 – Present**

- Efficiently help over 20 students weekly debug their Java code for programming assignments.
- Guide students to obtain theoretical knowledge of Java programming.
- Work with other TAs to diagnose common errors and prepare properly for encountering them.

IT Services Worker — **IL Valley Community College** — **Summer 2022**

- Created and managed high-availability computer clusters and VMs using Proxmox and Ceph.
- Provided support and catered software needs of 60+ faculty, covering over 500+ computers.
- Worked with Windows Group Policy to manage 3,000+ students' permissions and file access.

Relevant Coursework

COS226 — **Algorithms and Data Structures** — **Spring 2022**

- Developed expertise in designing and implementing advanced data structures such as hash tables and binary search trees in Java, utilizing optimal algorithms for efficient search and retrieval operations, and conducting rigorous performance analysis through Big O notation.

COS324 — **Intro. to Machine Learning** — **Fall 2023**

- Demonstrated proficiency in machine learning techniques, leveraging Python, scikit-learn, and Pytorch to implement cutting-edge algorithms for regression, k-means clustering, and feed forward neural networks, and effectively applying these methods to solve real-world problems.

COS217 — **Intro. to Programming Systems** — **Fall 2023**

- Acquired programming skills for composing large programs using C, assembly, and machine language, applying modularity, abstraction, programming style, and best practices for code development, testing, debugging, and performance tuning, and gained expertise in computing environments and architectures.

Technical Experience

Projects

- **Voice Cloning** (Fall 2021). Trained voice models using 100+ voice clips of politicians, and synthesized voices using NVIDIA's Tacotron2 and Waveglow on Princeton's computer clusters with SLURM scripts. **Python**
- **COS126 Statistical Library** (Spring 2022). Using object-oriented programming, created a statistical library to calculate functions like polynomial regression using an implementation of Gauss-Jordan Elimination. **Java**
- **Personal Website** (Present). Created personal website and published via git on GitHub. **HTML/CSS, JavaScript**

Additional Experience and Awards

- **COS126 "Most Robust Code" Award:** Awarded by Teaching Assistant to final project with the most robust and complete implementation of their final project.
- **Home Lab:** Repurposed PC running custom Arch Linux build with stack of various media management tools, using ZeroTier to access and SnapRAID for storage. Combination of VMs and Docker containers.