Streator, IL

Nathan C. Beck

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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 Advisor, Quiz Bowl, Table Tennis Club, Daily Princetonian Data Writer.

Employment

Full Stack Developer   **Ticket Wallet**   **Summer 2023**

- Spearheaded team of five mobile developers, using Git and Jira for version control and management.
- Developed intuitive and user-responsive mobile application frontend using Flutter based on Figma designs.
- Crafted robust backend using PostgreSQL and Django Rest Framework with REST APIs.

COS126 Lab TA   **Princeton University**   **Aug 2022 – May 2023**

- 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.

Relevant Coursework

COS333   **Adv. Programming Techniques**   **Spring 2022**

- Teamed up with students to design and deploy a full-stack application, leveraging Git for versioning, utilizing a Python backend, integrating a React frontend, and managing data with PostgreSQL for optimal user experience and functionality.

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.

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**

Skills

- **Languages:** Python, Java, C/C++, Go, TypeScript
- **Web & Mobile:** Flutter, HTML/CSS, JavaScript, React, jQuery
- **Databases & Backend:** PostgreSQL, Django (Rest Framework), Flask