Zhengyan Lyu

+ 1 401 215 3842 | zhengyan lyu@brown.edu | https://imbalzy.github.io/

EDUCATION:

Brown University, Providence, RI

- Master of Science in Computer Science
- Coursework: Database Systems, Computer Linguistics, Deep Learning, Distributed System, Computation in Economics and Games
- Overall GPA: 4.0

Villanova University, Villanova, PA

August 2017-May 2020

Expected: December 2021

- Bachelor of Science in Computer Science Minor: Mathematics
- Coursework: Database Systems, Advanced Algorithms, Deep Learning, Linear Algebra, Computer System, Programming Languages, Theory of Computability, Software Engineering
- Major GPA: **3.84**; Overall GPA: **3.63**

SKILLS:

- **Programming languages:** Familiar with **Python** (3 years+), **Java** (3 years+), **JavaScript** (2 years+). Experience with C/C++, Oracle SQL, Html, CSS, Lisp, Delphi, TypeScript
- Technical skills: Vue.js, React, Pytorch, TensorFlow, Linux, Git, Node.js, Scikit-learn, SVN

EXPERIENCE:

Software Engineering Internship, Shengqu Games, Shanghai

June 2020-November 2020

- Independently developed both front end and back end of game master systems for two mobile games
- HTML/CSS and JavaScript with Vue.js 2.0 framework at front end, Node.js framework at back end, MongoDB for database management system
- Refactored part of the code base with **Vue Router** and **ViewUI** toolkit and packaged **Vue** components to replace old duplicated code for better code readability and modifiability

Deep learning Research Assistant, Villanova University, Villanova, PA

May 2019-August 2019

- Constructed a weapon detection model based on YOLO model in Python with Pytorch library
- Implemented the model on preprocessed weapon datasets by transfer learning and fine-tuning
- Presented the poster with the 95% accuracy model at Villanova University in September 2019

PROJECTS:

Latent Space Arithmetic in Deep Learning, Brown University, Providence, RI

October 2020-Present

- Constructed a GAN model to generate images and modify attributes of images in Python with Tensorflow
- Proposed a new loss function to solve the problem of disentanglement in latent space arithmetic

Music Generator Project, Villanova University, Villanova, PA

March 2019-May 2019

- Designed and created a music generation application that allows user to generate music based on their preference parameters and random seeds in **Java**
- Worked in a group of four with Agile/Scrum methodology and Git version control system

E-Waste Trading System, Villanova University, Villanova, PA

September 2018-December 2018

- Users are able to post their e-wastes and buy e-wastes from other users
- Designed login and search user interfaces in React, HTML/CSS and JavaScript
- Stored data with MySQL relational database system using phpMyAdmin administration tool
- Edited all code on Linux Raspberry Pi remotely and ran Apache HTTP Server

CONTESTS AND ACTIVITIES:

Programming Contest Team, Villanova, PA

September 2017-May 2020

- 15th place in ICPC(International Collegiate Programming Contest) Mid-Atlantic Region 2019
- Hosted internal programming contest and presented solutions to team members in meeting every week