**Zhengyan Lyu**

+ 1 401 215 3842 | [zhengyan\_lyu@brown.edu](mailto:zhengyan_lyu@brown.edu) | <https://imbalzy.github.io/>

**EDUCATION:**

**Brown University**, *Providence, RI* Expected: December 2021

* 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

* 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