

BOYUAN HU

LEBANON, NH | 617-352-9080 | boyuan.hu.th@dartmouth.edu | www.linkedin.com/in/boyuan-hu/

EDUCATION

DARTMOUTH COLLEGE

HANOVER, NH

MASTER OF ENGINEERING IN ELECTRICAL AND COMPUTER ENGINEERING

EXPECTED JUNE 2024

- Courses Selection: Deep Learning, Operating Systems, Security and Privacy, Statistical Methods in Engineering, Applied Machine Learning, Compilers, Independent or Group Study in Engineering Sciences, Image Visualization and Analysis, Game-theoretic Design, Learning and Engineering

BEIJING UNIVERSITY OF TECHNOLOGY (BJUT)

BEIJING, CHINA

BACHELOR OF ENGINEERING IN INTERNET OF THINGS ENGINEERING

SEPTEMBER 2019 – JUNE 2023

- GPA: 3.58/4.20
- Relevant Coursework: Algorithms, Data Structure, Computer Architecture, Machine Learning, Deep Learning, Probability, Software Design, Operating System, Computer Network, Signal and System, Digital Signal Processing, Digital Circuit
- Honors: Prize for Exceptional Studies in AY 2021-2022 by BJUT; Scholarship for Comprehensive Performance in Fall Term of AY 2021-2022 by Beijing-Dublin International College, BJUT; Epidemic Special Scholarship for Learning Award in AY 2021-2022 by Beijing-Dublin International College, BJUT

WORK EXPERIENCE

CHINA INSTITUTE OF FILM SCIENCE AND TECHNOLOGY

BEIJING, CHINA

INTERN ENGINEER

OCTOBER 2022 – DECEMBER 2022

- Participated in a high-tech film intelligent production technology project based on deep learning
- Modified and debugged SR-ITM-GAN and JSI-GAN models, and trained them
- Utilized trained deep learning models for film and television image quality restoration and resolution enhancement

STATE KEY LABORATORY OF COMMUNICATION CONTENT COGNITION, PEOPLE'S DAILY

BEIJING, CHINA

RESEARCHER

JULY 2022 – OCTOBER 2022

- Reproduced relevant deep learning models in the field of Natural Language Processing (NLP), such as the OpinionDigest model
- Employed data scraping techniques to gather data from the internet, and utilized Python to develop data preprocessing software for data processing, building datasets for model training

RESEARCH PROJECT, PERSONAL PROJECT AND VOLUNTEER ACTIVITIES

MACHINE LEARNING FROM SCRATCH

BEIJING, CHINA

RESEARCH LEADER

FEBRUARY 2023 – MAY 2023

- Implemented two machine learning and deep learning models, Support Vector Machine (SVM) and Multi-Layer Perceptron (MLP), without relying on packages like scikit-learn, PyTorch, and Pandas.
- The SVM model implemented from scratch demonstrated a performance similarity of 96% to the scikit-learn's packaged SVM model, as shown by the Decision Boundary, using the Iris dataset
- Authored research reports and created presentation slides for speeches

DEMONSTRATION SYSTEM FOR DATA SHARING BASED ON BLOCKCHAIN

BEIJING, CHINA

RESEARCH LEADER

MARCH 2021 – MARCH 2022

- Organized initial stages of acquiring learning resources and materials, and facilitated study discussions to rapidly familiarize team members with blockchain technologies and practical knowledge of implementing blockchains using Python as the programming language
- Contributed to the development of a blockchain system, which involved functionalities such as adding, deleting, querying, and modifying blocks in the chain, data broadcasting, and encryption using Python
- Represented our team in communication with mentors, enhancing project efficiency and quality

HOUSE LEASING AND SELLING SYSTEM

PERSONAL PROJECT | OPEN SOURCE (GITHUB.COM/YUAN-KIVI/HOUSE-RENTING-SYSTEM)

- Developed a house leasing and selling system using an architecture that utilizes frontend HTML, CSS, and JavaScript, as well as backend SPRING BOOT and MySQL database.
- Users can freely lease or sell houses by registering and logging in. Filtering options allow users to quickly search for the desired properties. Additionally, users can modify their personal profiles.

PERSONAL WEBSITE

PERSONAL PROJECT | WEBSITE LINK (YUAN-KIVI.GITHUB.IO/PERSONAL-WEBSITE/)

- Created a personal website using HTML, CSS, and JavaScript, and uploaded daily technology blogs written in Markdown language.
- Deployed the website using Tencent Cloud Light Application Server (2GB RAM, 2 Cores) and used the domain (www.hu-bo-yuan.com) for showcasing the website.

STRAY ANIMAL PROTECTION ASSOCIATION

BEIJING, CHINA

MEMBER

DECEMBER 2019 – PRESENT

- Took charge of rescuing stray animals such as cat and dog and providing these animals with food and place to live
- Undertook donation and adoption check for animals as well

SKILLS AND INTERESTS

TECHNICAL: C, JAVA, Python, HTML, CSS, JavaScript, VUE, MySQL, Matlab, scikit-learn, Pytorch, Numpy, Pandas, Matplotlib, Git, Latex, Wireshark, LTspice, Ubuntu, Assembly Language, Microsoft Office Suite - Excel, PowerPoint, Word, Keynote, etc.

INTERESTS: Ball games (basketball, football, badminton), Skateboarding, Financial investment, etc.