

DIEP “Z” VU

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EDUCATION

University of Miami – Miami, FL

Aug. 2020 – May 2024

Bachelor of Science in Computer Science (GPA: 3.92), cum laude

Minor in Mathematics and Political Economy

Honors: 2024 Top Undergraduate Teaching Assistant, President’s Honor Roll, Provost’s Honor Roll

TECHNICAL SKILLS

Languages: Java, Python, JavaScript, C, C#, C++, SQL, R, HTML/CSS

Technologies: React, Redux, Node.js, Express, Oracle, AWS, Tableau, Unity, Git, PyTorch, Flask, NoSQL, MongoDB

WORK EXPERIENCE

Software Engineering Intern

May 2023 – Aug. 2023

Novo – Miami, FL

- Developed and maintained 2 live dashboards to monitor and analyze the user reviews from the company’s iOS and Android apps, leveraging Python’s Hugging Face’s Transformer models for NLP and Dash for data visualization
- Implemented autonomous deployment for sentiment analysis dashboards using Cron Job to ensure seamless and timely updates, resulting in a 20% user engagement increase
- Engineered 2 web scraping data pipelines for a chatbot employing BeautifulSoup and Scrapy, optimizing data extraction through strategic API calls and structured parsing
- Fine-tuned data for the OpenAI API, enhancing chatbot accuracy and reliability by aligning the pre-trained model with specific data nuances, resulting in improved performance

Software Developer

Jan. 2023 – May 2023

Institute for Data Science & Computing – Miami, FL

- Created a digital twin of a slit lamp in extended reality using Unity and C# to aid the training of medical students
- Iteratively refined the model through collaboration with cross-functional teams, ensuring alignment with medical training objectives and design principles while maintaining the integrity of the product architecture
- Leveraged Agile practices to inform the client of product progress and address potential blockers promptly

Teaching Assistant

Aug. 2022 – May 2024

University of Miami Department of Computer Science – Miami, FL

- Led review sessions and provided 1:1 feedback for 25+ students classes
- Assessed papers and coding assignments, speeding up the instructor’s grading process by 60%
- Courses: Computer Organization & Architecture, Data Structures & Algorithms

Website Developer

Sep. 2022 – May 2023

Google Developer Student Club UMiami – Miami, FL

- Created a dedicated site for the University of Miami Hackathon and updated the university’s webpage in a team of 4, improving user experience using HTML/CSS, JavaScript, and Bootstrap

Deep Learning Research Assistant

Mar. 2022 – Aug. 2022

University of Miami Department of Computer Science – Miami, FL

- Investigated adversarial training of deep networks as well as the relationship between neural networks’ linear nature and their vulnerability to adversarial perturbations
- Utilized PyTorch and TensorFlow to develop a model with high recall that is resistant to adversarial examples

Machine Learning Intern

Apr. 2021 – Jul. 2021

VNPT (Vietnam Posts And Telecommunications Group) – Hanoi, Vietnam

- Collaborated with the software team to develop a facial recognition device and improve its interaction with users
- Researched and designed different deep learning algorithms and neural networks for accuracy enhancement

PROJECTS

Predictive Modeling in Sports Betting | Machine Learning

- Built a Python data pipeline to gather a robust dataset; performed data preprocessing and feature engineering
- Utilized ML models in R to predict soccer match outcomes, showcasing significant predictors that boost model accuracy

Time Capsules | Full-stack Web Development

- Created a website that allows users to share visual memories and build social connections with friends
- Utilized React, Redux, Express JS, Node JS, and MongoDB

Music and Mental Health Analysis | Data Analysis and Machine Learning

- Analyzed the relationship between music genres and mental health using various Scikit-learn models
- Applied frameworks and statistical models in Python to perform data cleaning, training, and visualization tasks