Dylan Zhuang

561-815-9080 | dylanzhuang1025@gmail.com | https://www.linkedin.com/in/dylan-zhuang/ | github.com/Dzeddy

EDUCATION

University of Florida   Gainesville, FL
Bachelor of Science in Computer Science   *Graduation: June 2025*
    GPA: 3.99/4.0
    Related Coursework: Data Structures and Algorithms, Algorithms Abstraction and Design, Operating Systems

TECHNICAL SKILLS

Languages: Python, C/C++, SQL, JavaScript, R
Frameworks: React, Node.js, MongoDB, Material-UI
Developer Tools: Git, Google Cloud Platform, VS Code, Visual Studio, PyCharm, IntelliJ, IDA Pro, OllyDbg

EXPERIENCE

Teaching Assistant - Advanced Programming Fundamentals   August 2023 – Present
University of Florida   *Gainesville, FL*

- Leveraged Canvas to improve assignment turnaround times through efficient grading practices.
- Employed Canva to design course materials, visual aids, and infographics, enhancing comprehension and retention rates.
- Communicated and mentored during office hours, boosting students' performance while also leading technical workshops and conducting code reviews that reduced errors and improved code clarity.

Software Engineering Intern   June 2023 – August 2023
DeepMotion   *San Diego, CA*

- Pioneered a cross-platform button feature using Typescript and the Navigator API that increased video sharing between apps by 35%, resulting in a boost in user engagement and wider content reach.
- Translated and optimized multilingual content tables into English, enhancing data accessibility and coherence for users, resulting in increased operational efficiency.

Research Assistant   June 2020 – June 2022
Florida Atlantic University   *Boca Raton, FL*

- Utilized transfer-learning to prioritize and rank 1,672 drug compounds by applying classification models on 305,520 distinct images, resulting in the identification of several compounds with the potential to treat SARS-Cov-2 viral cells.
- Designed a Convolutional Neural Network based on the DenseNet architecture for binary classification, with an added SoftMax layer for confidence scoring.
- **Zhuang, D.; Ibrahim, A.K.** "Deep Learning for Drug Discovery: An Exploration into Efficiently Identifying High-Efficacy Drug Compounds via Cascade Transfer Learning." Appl. Sci. 2021, 11, 7772.

PROJECTS

Overwatch Mod | *x86 Assembly, IDA Pro, Reverse Engineering, Memory Forensics, OllyDbg*   June 2022 – Present

- Developed an Overwatch gameplay enhancement tool for disabled users appropriating an IOCTL driver to read/write memory.
- Executed reverse engineering techniques such as pattern scanning, dynamic analysis, and static analysis on the proprietary Overwatch engine to develop advanced modding functionalities.
- Exploited Byfron's exception handler to decrypt necessary pages.
- Implemented multi-threading for optimized performance and responsiveness.
- Provided live support to 15 monthly users

NeuroConnect | *React, CRUD, Express, MongoDB*   June 2022 – Present

- A full-stack social media application tailored for neurodivergent users
- Leveraged JWT for authentication and OAuth2 for authorization alongside manual review processes to ensure a platform free from malicious actors
- Designed and integrated a real-time messaging system with socket handling
- Managed and processed 3 thousand posts and messages, demonstrating application stability and robustness.