Chung Yik Edward Yeung

206-387-7161 edward.yeung2004@gmail.com linkedin.com/in/chungyyeung github.com/edwardyeung04

EDUCATION

University of Washington **Expected June 2025**

Bachelor of Science in Computer Science, GPA: 3.83 - Dean's List *Seattle, WA*

Relevant Coursework:

- Data Structures & Algorithms, Software Design & Implementation, Software Engineering, Hardware Software Tools
- Deep Learning, Natural Language Processing, Computer Vision, Artificial Intelligence, Autonomous Robotics, Computer Security

EXPERIENCE

Wyze **June 2024 – September 2024**

AI Intern *Kirkland, WA*

- Constructed and tested image captioning and processing pipelines, achieving 92.3% accuracy in categorizing in-house data
- Analyzed consumer trends across 160,000+ devices spanning 12 camera models using AI Service Monitoring logs and pipeline-generated labeled data
- Scaled pipeline for deployment to Wyze's 10M+ camera user base, enhancing data classification efficiency and categorization capabilities

UW Database Group **December 2023 – August 2024**

Research Assistant *Seattle, WA*

- Developed and refined the graphical interface for MaskSearch in collaboration with UW PhD student Dong He and Allen School director Magdalena Balazinska, enabling efficient querying and visualization of large-scale image mask databases
- Investigated discrepancies between model saliency and human attention by implementing efficient aggregation queries and optimizing Intersection over Union (IoU) computations for Scenario 3
- Improved MaskSearch GUI and presented innovations at VLDB 2024, demonstrating accelerated mask-based queries and real-world machine learning workflow applications

LayerZero **June 2022 – September 2022**

Software Engineering Intern *Vancouver, BC*

- Built a property contract verification system using LayerZero's Omnichain Fungible Token (OFT) Standard, enabling partial property ownership and seamless cross-chain token transfers without asset wrapping or middlechains
- Optimized OFT-based fungible token transfers across Fuji and testnet Bitcoin chains, reducing transaction times by 11% and streamlining property ownership interactions

PROJECTS

Commitment Issues **Python, Node.js, Git, OpenAI API**

- Led development and deployment of Commitment Issues, a CLI tool leveraging OpenAI's GPT models to automate Git commit message generation based on code diffs
- Managed AI integration, CLI design, and project coordination to deliver a cohesive, feature-rich tool as part of a multidisciplinary team
- Implemented change type classification, commit filtering, and regeneration features by integrating Git commands and OpenAI API for secure and efficient context-aware message generation

Point Cloud Classifier Robustness **Python, PyTorch, GCP, PointNet**

- Authored "Evaluating Corruption and Adversarial Robustness of Point Cloud Classifiers," investigating the interplay between corruption and adversarial robustness in models like PointNet and DGCNN
- Developed and validated Auto-PGD method, achieving the lowest overall error rate (Avg. ER: 24.74) and superior adversarial robustness (ER_{Adv}: 42.28) compared to PGD, PointCutMix, and RSMix

Fact Retrieval and Ensemble Models for OpenBookQA **Python, PyTorch, Hugging Face, OpenAI API**

- Authored "Fact Retrieval and Ensemble Models on OpenBookQA," developing strategies to enhance performance on OpenBookQA, a benchmark for science reasoning
- Developed and evaluated fact-retrieval pipelines with Sentence-BERT, boosting accuracy by 2–4%, with GPT-4 + fact-retrieval achieving top 5 leaderboard performance (94% accuracy)
- Optimized ensemble methods with fine-tuned transformers, addressing correlated errors and evaluating the impact of fact retrieval and model size on performance

SKILLS

Languages: Java, C, C++, Python, Solidity, JavaScript
Frameworks & Libraries: React, PyTorch, Node.js, Hugging Face
Tools & Platforms: AWS, Google Cloud Platform, Docker, Git, SQL, GitHub