ANISH DAS

EDUCATION

University of Cambridge | MEng in Computer Science

Oct 2021 - June 2022

Studying Courses in: Distributed Ledger Technologies, Overview of Natural Language Processing, Probabilistic Machine Learning, Advanced Topics in Machine Learning and Representation Learning on Graphs and Networks.

University of Cambridge | BA in Computer Science achieved Class I

Sep 2018 - June 2021

- Awarded the **Bateman Scholarship** for excellent performance in Exam.
- 3rd Year(*Part II*): achieved **Class I** (focused on Info Theory, Computer Vision, Machine Learning and Quantum Computing, with dissertation in Cross-Lingual Summarization–Investigating the effect of Translation on Summarization)
- 2nd Year(Part 1B): achieved Class I mark (remained unclassed due to COVID).

EXPERIENCE

On-Device Learning Intern | Department of Computer Science and Technology

July 2021 - Sep 2021

- Investigated and Summarized possible reasons for latency in GPU, thus, expanding on the research already done.
- Developed and Optimized matrix multiplication on Mobile GPUs leading to a 200% increase in computation speed
- Utilized further tricks to make the GPU faster than the baseline (CPU).

- Developed a customizable chat-bot using Diaglogflow which eliminated 80% of the programming required.
- Upgraded the graphics kernel for the Virtual Environment making the experience smoother.
- Headed a MineCraft Mod project in a Hackathon with Cambridge Assessment which won the Best Project prize.

PROJECTS

Dissertation Project Oct 2020 - May 2021

- Conceptualized and Executed an Investigation of the effect of Translation quality on Summarization quality.
- Built an understanding of the core architecture involved in the project.
- Evaluated the resultant translations and reported the findings in a report. Which achieved a first class mark.

pyopenci-ml Aug 2020

- Investigated how to program a OpenCL Kernel & how to build and train an Artificial Neural Network.
- Engineered a machine learning library in python compatible with all hardware accelerators using pyopencl.
- Improved GPU performance on Matrix Multiplication to be 10x faster than baseline-CPU (numpy).

manga-viewer May 2020

- Studied web-scraping with Selenium and concurrent programming in python.
- Implemented a web-scraper with Selenium and a GUI with Tkinter in python for scraping and displaying manga.

Automatic Evaluation of R code | 2nd Year Group Project

Mar 2020

- Headed a group of 6 to build a novel tool for automatic evaluation of R. Achieved 2nd highest score.
- Analyzed core-requirements of Cambridge Spark's EduKate. Al and Assigned roles to the team-members.
- Implemented the validation tool for automatically evaluate R code (check for semantic correctness).

SKILLS

Languages

- Python with experience in scientific computing; concurrent programming & ML (Passed Linked-In assessment)
- Java with experience in serialization, reflection & class loaders; along with concurrency and synchronization
- C & C++ embedded programming; multi-threading & multiprocessing. (Passed LinkedIn Assessment: Top 5%)
- Familiar with: C# (with unity);OpenCL; Ocaml; HTML/CSS/JavaScript; Prolog;
- Software Development using object-oriented design; testing; version control & solving problems with logical thinking.
- Native C++ development on Android using Android Studios; Contributing to the alibaba/MNN project: OpenCL Core.
- Natural Language Processing: Undertook undergraduate-dissertation project; further pursuing research in Master's.
- Machine Learning (Passed Linked-In assessment) with Tensorflow/PyTorch: designed LSTMs for analyzing VIX to build a portfolio from the SP500; Achieved Kaggle Certificates in Intermediate Machine Learning; worked on Transformers & MobileNetv2