Sunipun Talukder

Dhaka - 1212, Bangladesh

(+880)1765600953
talukdersunipun@gmail.com
https://www.linkedin.com/in/sunipun

Work Experience

BrainCraft Ltd, Dhaka, Bangladesh   Jan 2022 - Present
AI Engineer
- Engineered **generative models** for image creation in **Cartoon.ai**, propelling it to top-grossing status.
- Collaborated intensively in developing and deploying a **semantic image segmentation** model, elevating user experience and delivering precise segmentation functionality to a user base exceeding **10 million**.
- Implemented a comprehensive system for **text-to-image** and **text-to-gif** generation using **stable diffusion** models and **Python**, showcasing proficiency in advanced machine learning techniques and **image processing** algorithms.
- Planned and implemented an Image to Video making module using **OpenGLES** and **MediaCodec** API for the **GIFMaker** and **Add Music to Video** android apps, resulting in over **250,000** downloads on the Google Play Store.
- Developed a core video decoder/encoder module using raw **C++ libraries** and the Android **NDK**, resulting in a remarkable **10x** performance enhancement on lower-end devices.
- Managed and guided a team of four members in the successful development of a feature-rich Slideshow app, leveraging Android Core functionalities, **MVVM** architecture, custom rendering techniques, and advanced video **encoding/decoding** technologies.

LiiLab, Sylhet, Bangladesh   Jan 2021 - Dec 2021
Software Engineer - Android
- Architected and Programmed the **Intro Maker** app, leveraging **Canvas** and Native Android APIs to create stunning intros. Achieved an impressive milestone of over **100k** downloads on the Play Store.
- Optimized **GkQuiz's** rank list functionality using **Firebase** Realtime Database and Firestore, achieving a remarkable **4x** performance boost. Attracted over **250k** users on the Play Store.

Technical Skills

- Machine Learning and Image processing **: Pytorch**, CNN, RNN, transformer, NumPy, Scikit-learn, OpenCV, Matplotlib, Pillow.
- Proficient knowledge in **Algorithms**, **Data Structures**, **Dynamic Programming**, **Number Theory**, **Probabilities**.
- Utilized **RenderScript** and **OpenGL ES** for **graphics rendering**.
- Solved over **2000+** Data Structure & Algorithmic problems.
- Experienced in **Agile Environment, MVVM** and **MVC** Architecture, **Github**, and Bitbucket.
- Programming Languages**: Python**, C++, Java, Kotlin, Swift.
- Others : Docker, fastapi, gradio, MySQL, SQLite

Education

Shahjalal University of Science And Technology, Sylhet, Bangladesh
Bachelor of Science in Mathematics   April 2016 - June 2020

Achievement & Awards

Competitive Programming & Contests   Nov 2015 - Aug 2020
- Codeforces - ID : **stsaikat** (**Expert**, Maximum rating **1767**)
- CodeChef - ID : **thestsaikat** (**4 star**, Maximum rating **1844**)
- Leetcode - ID : **sunipun**
- ACM-ICPC Dhaka regional preliminary contest, 2017, 2018, 2019 (Best : 126th)
- Codejam 2019 - Round 1B (4819th)

Projects - Personal

- **Classification Made Easy**
  To make classification training, validation and test easier with different architecture with just a few lines of code.
- **Semantic aware Image search**
  Developed an image search engine with semantic meaning of an image utilizing vectordb and clip interrogator.

Voluntary Activities

- **Moderator & Trainer**, Euclid Programming Club, SUST   Jan 2017 - Dec 2020
  Conducted over 30 programming workshops, training 200+ students in competitive programming
- **Admin & Program coordinator**, Shuddho Social Organization, Sylhet, Bangladesh   July 2015 - July 2019