Ashis Paul

Software Engineer

(+91) 7003666272 | paulashis0013@gmail.com | ashis0013 | ashis-paul-173479150 | Ashis Paul

About

Full stack developer with over 2 years of experience in building software solution at pace and at scale. Passionate in using declarative paradigm. As a dedicated problem solver I have experience of working in almost all corners in business driven software development. Apart from having hands-on experience in frontend, backend and native android development, I have worked extensively in the domain of AI and deep-learning. Skilled in **Microservices, Deep Learning, Distributed Systems, Generative AI, Python, Go, Kotlin, Amazon Web Service, Low Level Design, Algorithm, Data Structure.**

Skills

Technical Skills	Micro services AWS Deep Learning Next.js RASA Fullstack Development
Programming Languages	**Go** Typescript Python Kotlin Zoomba (JVM)
Soft Skills	Agile development Problem solving Multitasking Teamwork Mentoring

Experiences

Blox

Hyderabad, India(Remote)

Software Engineer — *Feb. 2023 - Present*

- Worked for Blox Labs – whose stated goal is to disrupt industry standards - https://labs.blox.xyz
- Developed voice-based real estate search which is able to handle contextual natural language Search - “sea facing properties in Malad east”. Contributed to the underlying Transformer based **NER model**, Golang wrapper service and website integration.
- Worked on increasing Call Center Efficacy via voice-based emotion detection and sentiment analyzer. Developed a novel method to separate voices in an audio using deep feature extraction followed by clustering.
- Delivered generative AI-powered single click project listing generator from RERA-Id as input using **puppeteer (Node.js)** powered web-scrapping and GPT language model.
- Developed **RASA based chatbot** which is capable to search properties, perform actions such as site booking and answering non-domain specific questions like chat-GPT.
- Developed the world’s sleekest real estate web app with Next.js and simple Golang middleware.
- Implemented a GAN based **image enhancement pipeline** incorporating AWS Lambda and S3 to make sure all the images in the website are AI enhanced.
- Delivered a Live and Past location tracking system for Agents (Relationship Managers) using lowcode backend framework and corresponding DSL

Compass

Hyderabad, India

Software Engineer — *Jul. 2021 - Jan. 2023*

- Contributed to **gRPC** backend services responsible for generating insights for compass listings. Improved test coverage of the service codebase from 10% to 86%. Currently contributing to new features to gather openhouse and email-campaign insights.
- Developed a backend microservice to gather insights on the third party support ticketing service, which helped product team to identify the problem areas in customer support and helped the support team to reduce the resolution time by 25%.
- Delivered frontend features using React to enhance article search used in the compass Support and Onboarding System.
- Worked with CRM and TM Android team and **delivered crucial features** such as Client Dashboard, Contact Import, Household Support which are being **used by over 10 thousands compass agents.**
- Fixed over 10 production crashes during on-call duty and refactored(LLD) over 5000 lines of code on the Android codebase.

Microsoft

Bangalore, India

Software Engineer Intern — *May. 2020 - Jul. 2020*

- Developed a pClick model to predict clickability of bing ads from global market data using Aether and Scope.
- Studied impact of the global model on the large and small markets where the global model performed as good (less by 0.01%) as market specific models.

Education

Jadavpur University

Kolkata - 700032

Bachelor in Computer Science and Engineering — *Aug. 2017 - Jun. 2021*

CGPA: 8.91/10 First Class Honours

Chatra Nandalal Institution

Serampore, Hooghly - 712204

Higher Secondary — *Mar. 2015 - May. 2017*

Percentage: 93.4%

Projects

Inverted Bell-Curve based Ensemble of Deep Learning Models

PYTHON{PYTORCH} *Dec. 2020 - Jan. 2021*

- Utilized the inverted Gaussian function to formulate a method of weighted average to combine the confidence scores from classifiers.
- Implemented a deep ensemble using the proposed method as combinator function to detect COVID from 3000 chest x-ray images and achieved 99% accuracy.

SVM based Deep Ensemble for Music Symbol Recognition

PYTHON{PYTORCH, SKLEARN} *Feb. 2021 - Mar. 2021*

- Used fine-tuning of imagenet pretrained models on music symbol datasets to build recognizer model.
- Applied support vector machine as a ensemble combinator to combine Transfer Learning models at score level.

Publications

- [1] Paul, Ashis, et al. "SinLU: Sinu-Sigmoidal Linear Unit." Mathematics 10.3 (2022): 337.
- [2] Paul, Ashis, et al. "Inverted bell-curve-based ensemble of deep learning models for detection of COVID-19 from chest X-rays." Neural Computing and Applications (2022): 1-15.
- [3] Paul, Ashis, et al. "An ensemble of deep transfer learning models for handwritten music symbol recognition." Neural Computing and Applications (2021): 1-19.
- [4] Dhar, D., Chakraborty, N., Choudhury, S., Paul, A., Mollah, A.F., Basu, S. and Sarkar, R., 2020. Multilingual scene text detection using gradient morphology. International Journal of Computer Vision and Image Processing (IJCVIP), 10(3), pp.31-43.