

Prayalankar Ashutosh

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To continuously strive for higher achievement in life and working with people who are eager for learning. I enjoy challenges and look forward to the learning opportunity.

WORK EXPERIENCE

NovaSignal - Senior Applied ML Engineer, Oct 2021 to present

NovaSignal is a robotics and artificial intelligence company which helps to perform cerebral ultrasound, NovaSignal uniquely captures blood flow data in real time. The NovaSignal Platform empowers the clinical team with critical, real-time information about cerebral blood flow to guide diagnosis and improve patient outcomes.

- Developed a data visualization app to monitor and recommend the data generated during the exams which can be used by doctors to give feedback on improving the algo.
- Optimizing the search algorithm Coarse Hillclimb, the grid spiral searches for obtaining better quality signals and improved search time.
- Worked on algo for dynamic initial robotic placement improvement for getting better quality signals.
- Working on DL Model development for ASG detection.
- Working on developing a central storage system to save data generated across hospitals to be used to develop/improve existing ML & DL models.

Technologies : Search Heuristics, State Machine, AWS, ECS, SageMaker, Git, Postgres, S3, Rest APIs, Jenkins

Innominds Software Pvt. Ltd. - ML Engineer, June 2018 - Oct 2021

Activ Surgical

Activ Surgical specializes in building edge devices which support surgeons with critical surgeries to get the best possible outcome. For Activ surgical we developed various semantic segmentation algorithms to segment body tissues from various surgical tools and backgrounds.

Technologies : Tensorflow, PyTorch, Ec2, S3, Contrastive Learning, LinkNet, UNet

Burst

Burst is a media (images , videos) acquisition and distribution platform. The end users can submit the media and the same can be easily distributed by the business end through Television broadcast, official sites .

- Worked on end2end development and deployment of Data pipeline and processor for Machine Learning & Deep Learning tasks which handles various aspects like modules for database connection, Queue connection, S3 connection , error handling .
- Developed and deployed various Machine learning modules like media clustering, object detection, NSFW detection and aesthetic image quality score.

Technologies : Tensorflow, Postgresql, AWS, RabbitMq, Docker, MLOps, ML processor design, Jenkins

Rare sound event detection in everyday audio

- Built a deep learning model to detect rare sound events, namely BabyCry, Gunshot and Glass Break in noisy environments (daily noise like traffic, random talks etc) .

- The model achieved state of the art results and was at the top of the leaderboard (as of Feb 2019).

Technologies : Keras, Tensorflow, MultiResRNN, Python, RNN

E-zest Solutions Ltd. - Software Engineer. May 2017 - June 2018

Smarterme

- The work includes developing various ranking algorithms along with data and pattern analysis.
- Developed a model to extract various entities like Name , Contact No , Email address etc from a business card.

Technologies: Python, Tensorflow, Google Computer Vision

Email -Archiving Solution

- Worked on developing an email archival solution in which emails of various organizations can be archived to a big data platform with various functionalities like search , monitoring , classification.

Technologies : Python, Spring, Hbase, Solr

Open Source Project

Interview bot

Developed an end to end bot which can interact with users through chat and voice and take an interview with human-like experience.

Technologies : Microsoft bot framework, Node JS, Python, Langchain, AI, Azure devops, Azure text to speech, Azure web app , Azure repos

Internships

- Bottr : Worked as a Deep learning researcher for the development of chatbots.
- Tata Consultancy Services : Worked as ML engineer for text extraction from images.
- Flochat : Worked as ML engineer for entity extraction and tagging in group chats for recommendation.
- Enterprise Bot : Worked as a Deep learning researcher to determine the applications of Deep learning into the chatbot use cases.

SKILLS

- Deep Learning - Recurrent/Recursive Neural Nets, Convolutional Neural Nets
- NLP - Sequence Labeling, Classification, Transformers, BERT, LLMs
- Machine Learning - Regression, Ensemble Learning, Predictive & Statistical Modeling
- Languages - Python, C++, Java, C#, JS, SQL
- Image Classification / Detection : Resnet , Inception , YOLO , SSD
- AWS, Azure, S3, Docker, Jenkins, ELK, Flask, SageMaker
- Microsoft Bot Framework, Microsoft Cognitive Services

ACHIEVEMENTS

- Contributed in opensource by developing a dataset of various news articles relating to employee layoff , new product launch and financial budgets by company. The dataset is openly available on GitHub and dataexchange.
- Represented Mike Messenger and got second place in a chatbot development hackathon organized by e-Zest Pune. (June 2016)
- The ML Model was in the top 20 models across India in the HealthCare Analytics challenge organized by NASSCOM India. (Aug 2016)
- 15/3347 Rank in machine-learning-indiahacks-2016 by hackerearth (Jan 2016).

EDUCATION

- Shri Mata Vaishno Devi University, Jammu — B.Tech (CSE)
- Air Force School, Gorakhpur — Senior Secondary
- Zenith Convent School, Gorakhpur — High School