SAROJ BASNET

ML | DS Researcher/ Engineer

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ML | DS

Feature Eng/Selection
Hyper-parameter Opt
Model Dev/Eaval   EDA
Data Viz   RNN   GRU
LSTM   Attention   CNN
Transformer   RIM-D

SOFTWARE ENG

python   Golang   Nodejs
gRPC   RESTFul APIs
Lambda   MySQL   PgSQL
Microservices   Docker
K8s   AWS Cloud   CI/CD
Linux   _sh   Agile
Scrum   Jira

TOOLS

AWS SageMaker   PyTorch
Numpy   PySpark
Matplotlib   Pandas
Power BI   Seaborn
SK Learn

EDUCATION

MSc Computer Science (Research)

📍 UofR, Canada

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BSc Information Technology

📍 Wel-Tec, New Zealand

PUBLICATION

RIMD:A Novel Method for Clinical Prediction. AI In Medicine, Elsevier.

EXPERIENCE

Machine Learning Researcher | Data Science Laboratory

📅 07 2020 – 04 2022   📍 Regina, Canada

- Performed data extraction, feature engineering, and feature selection on the large clinical data set (MIMIC III).
- Analyzed and visualized clinical data.
- Developed a new RIM-Decay model for mortality, and Length of Stay Forecasting (Published in AI in Medicine Special edition)

Programmer Analyst – Research (IS) | UofR

📅 10 2021 – 11 2022   📍 Regina, Canada

- Developed a sentiment classifier for survey responses and integrated it into existing Moodle for clinical psychological research.
- Data collection from Qualtrics, data preprocessing, and creating reports.
- Psychological data, cleaning and reporting. Document to data using Optical Character Recognition on survey data.
- Worked on feature development for Online therapy unit built on microservices architecture

Sr. Software Engineer | CyaLive

📅 11 2022 – 09 2023   📍 Torronto, Canada – Remote

- Golang, GStreamer, Javascript, MySQL, Redis, Etcd, SQS, Websocket, WebRTC, TCP/UDP, Kubernetes Jenkins, CI/CD
- Implementing media (audio/video) mixing using GStreamer and broadcasting in a media server.
- Developed and maintained a load balancer to scale the media server.
- Developed and maintained a Chrome extension to host watch-party in applications for major OTT, and collect data.

Research Intern | KRATE Distributed Information Systems

📅 10 2020 – 05 2021   📍 Saskatoon, Canada

- Developed a prototype model over encrypted data using cryptography, and distributed computing.

Lead Software Engineer | HiUp Solutions Pvt. Ltd.

📅 03 2017 – 12 2019   📍 Ireland, HQ

- Led team of seven people to develop and maintain LMS.
- Developed Zoom-like online learning platform using Twilio, and Websocket.
- Developed middleware for API authentication, validation, and response.
- Designed and developed Travis CI/CD in AWS elastic beanstalk, dockerhub.
- Performed System analysis and design [distributed systems]