

Shishir Bhattarai

Senior Software Engineer

Master's in Machine Learning and Data Mining
Mathematics(Minor)
Aalto University
Espoo
Finland

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OBJECTIVE

Use academic and six years of professional experience in data science to mentor and lead the data science team/project to build and deploy a data pipeline and machine learning model to generate business values.

EXPERIENCES

OuraHealth Oy

Data Engineer, DataML Squad
Finland
Sept 2021 - Present

Leapfrog Technology Pvt. Ltd.

AI/ML team, Senior Machine Learning Engineer
Nepal
Nov 2019 - Aug 2021
Programming language and framework: Python, SQL, Postgres, [MLflow](#), [NNI](#), [Apache Superset](#), [Kedro](#), AWS, Azure

Accomplishment

- Led the machine learning(ML) team in [Caboom](#)(a product of Leapfrog Technology Inc.) from the ideation phase to POC, and delivered high-quality deliverables by the agreed deadline.
- Worked with a cross-functional team, and mentored and guided team members to get familiar with ML terminology and ML concept in [Caboom](#).
- Assist with writing requirement specifications and design documents for a variety of development tasks including feature development, database design, and system integrations in the Leapfrog Technology Inc. AI team.
- Worked as a mentor and the team lead for technical help and support in the AI team.
- Refactoring, debugging, testing, and implementing changes to existing applications to meet project requirements.
- Make architectural decisions in collaboration with technology experts.
- Design, build and maintain efficient, reusable, and reliable software.
- Designing and developing business logic using REST APIs.
- Preparation, drafting, and review of software documentation and project reports.
- Deploy, monitor, and maintain ML applications.

Verto Analytics

Research Operation and Data Science(RODS), Data Analyst

Finland

June 2017 - Oct 2019

Programming language: Python, R, SQL, AWS Environment, Keras, TensorFlow

Accomplishment

- Took the initiative and led the machine learning research project of four people and successfully deployed the model to generate revenue and business value.
- Designed and successfully implemented a data pipeline and database which stores time-variant data with its different versions and, owned the pipeline and database.
- Managed platform development and deployment of internal Python code libraries for querying and aggregating data, including specs, coding, unit tests, and integration tests, and owned it.
- Completed multiple successful analyses of internal and customer projects using different analysis techniques and machine learning models(Bayesian analysis, clustering, classification, ensemble, boosting, and deep learning).
- Worked as a mentor and the team lead for technical help and support.
- Took initiative to improve code quality and actively participate in code peer review.

Sprout Technology Services Pvt. Ltd.(CloudFactory.com)

Associate Data Scientist

Kathmandu, Nepal

December 2012 - July 2015

Programming language: Python, R, SQL

Accomplishment

- Worked in sequential data to design a mathematical model to identify malicious and fraudulent online workers based on real-time and historical suspicious and unusual behavior while doing online tasks and successfully improved data quality.
- Developed task scoring model to predict highly accurate tasks (95%) transcribed tasks by workers from cloud sourcing.
- Build a framework in Ruby to calculate the suspicion of text using text edit distance.
- Prediction of accurate tasks using custom mathematical models and machine learning algorithms like logistic regression, SVM, naive Bayes, and Random forest.
- Used Python, R, and SQL to develop an automatic data processing pipeline by gathering data (10M batch) from production databases, performing data cleaning transformation, visualizing processed data, and implementing the best prediction model.
- Online workers' clustering and segmentation based on their online working hours, throughput, and accuracy helped in identifying groups of workers likely to meet SLA.
- Research and development of OCR framework to automate and reduce data entry time.
- Research and development on image quality detection(blurry image).

Information and Research Lab, Kathmandu University

Research Intern

Kathmandu University, Nepal
October 2012 - January 2013
Programming language: python

Accomplishment

- Newspaper lexicon creation.
- Text preprocessing and analysis.
- Sentiment polarity analysis model.

PROGRAMMING LANGUAGES AND FRAMEWORKS

R	Python	AWS ecosystem
SQL	Keras	Pytorch
Stan	Docker	Apache Airflow
Alembic	Redshift	Apache Lucene
Postgres	MySQL	SQLAlchemy
Tableau	Django	MLFlow

EDUCATION

Master's in Machine Learning and Data Mining

Minor: Mathematics
2015 - 2017
Grade: 4.03/5
Aalto University

Deep Learning, Bayesian Data Analysis, Algorithmic Methods of Data Mining, Advanced Probabilistic Machine Learning Methods, Machine Learning using Kernel Methods, Multivariate Data Analysis, Natural Language Processing, Convex Optimization, Convex Optimization for Big Data, Information Retrieval, Scalable Cloud Computing, Cognitive Science

Bachelor of Science in Computer Science and Information Technology

2008-2013
Grade: 80.88%
Tribhuvan University

MOOC COURSES

- Machine Learning
- Computing for Data Analysis
- Statistical Learning
- Principles of Economics
- Introduction to Big Data with Apache Spark

RESEARCH

Probabilistic Machine Learning Group, Aalto University

April 2016 - October 2016

Worked with [Prof. Samuel Kaski](#) and Dr. [Antti Kangasrääsiö](#) to develop a probabilistic information retrieval model which uses users' search histories along with current information needed to relocate the relevant past search information.

Precious/Richfields EU projects, partner Aalto University

Jan 2017 - May 2017

Worked with [MS. Todor Ginchev](#) to develop a [deep learning model using Faster CNN](#) to classify food items in the images.

PUBLICATION

- [Interactive User Intent Modeling, 2016](#)

AWARDS

- 2015 Inclass Kaggle Wine Classification competition winner among 200+ students
- 2016 Honours Student, Aalto University for outstanding academic performance
- Aalto Fellows 2017, selected as one of the top 10 students among 100+ students for [Aalto Fellows](#) conducted by the Aalto Venture Program, Aalto University

LINKEDIN

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