Aditya Acharya

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SUMMARY

4 years of professional experience in applying analytical and numerical methods (traditional machine learning and deep learning) to model a broad range of problems like computer vision, operations research, planning and decision making, recommendation system, classification, and time-series prediction. Proven track record of creating and improving new computational methods to perform dynamic and static analysis of otherwise intractable or redundant engineering and biological systems. Strong ability to collaborate and work in a team environment on multi-disciplinary projects.

EDUCATION

Doctor of Philosophy (Ph.D.), Computer Science, 2015- 2019
University of Birmingham, United Kingdom

MSc., Human Computer Interaction, 2013-2014
University of Birmingham, United Kingdom

WORK EXPERIENCE

Aalto University, Helsinki, Finland
Postdoctoral Researcher   01/2020-Present

- Collaborated on a project predicting user behaviour in a multi-tasking task and developed Deep Reinforcement Learning model to match 80% of the chosen performance metric.

- Analysed and performed multivariate statistical analysis to find new insights on users' cognitive behaviour.

- Mentored students on research projects from ideation to tool deployment.

- Published and presented work at high impact conferences.

Alan Turing Institute, London, United Kingdom
Research Associate   11/2018-12/2019

- Collaborated on a project for transport modelling and applied machine learning model to achieve 93% accuracy on user choice prediction.

- Performed end-to-end analysis from data processing to model training and deployment for business insights.

- Improved product feature velocity by contributing to docker setup for automated CI/CD.

- Liaising with the government and research organisations to scope out the data requirements and processed it for quantitative research questions.

- Presented to stakeholders the economic impact of unregulated private fleets in cities.

Aricent, Bangalore, India
Software Engineer   08/2011-08/2013

- Deployed Java based real-time analytics portal for an on-demand video streaming website serving over 1000+ subscribers.

- Configured the clustered based deployment of WebLogic server on Linux environment to increase request counts for load balancing by 2x.

SKILLS

Programming Language, Libraries and Methods

- Python	- Pytorch	- Pandas	DQN, PPO,
- R	- TensorFlow	- ggplot2	A3C, MLP,
- JavaScript	- Scikit-Learn	- seaborn	CNN, RNN,
- Java	- OpenCV	- Leaflet	LSTM, GAN,
- SQL	- NumPy		KNN, Random
	- NLTK		Forest, Linear
			Regression

Analytical

Optimal control: markov decision process, stochastic simulation, statistical analysis, hypothesis testing, computational modelling, behavioural modelling, supervisory control, Bayesian inference.