

ACHYUDH RAM

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SKILLS

LANGUAGES

Python • Java • C# • SQL • C • \LaTeX

FRAMEWORKS

Hadoop • Spark • PyTorch • Keras •
Scikit-Learn • Numpy • NLTK • Flask

PROJECTS

TARDIS

A framework for running ensembles of Seq2Seq Neural Machine Translation models on PySpark using Elephas

CASTOR

Deep learning models for computational linguistics in PyTorch by the Data Systems Group at the University of Waterloo

PROPR

Developer feedback and report generation tools for improving the reviewability of pull requests on GitHub

OPENEYE

A web app to target misinformation on social issues by visualizing the dichotomy between facts and perceptions on Twitter

FORESIGHT

An Android app that uses object detection, Google Places API, and Firebase to help the differently-abled navigate better

TALKS

GOOGLE DEVELOPER GROUP

Apr 2017 | Goa, India

Leveraging the power of Virtualization, Docker and the Cloud

PUBLICATIONS

What Makes a Code Change Easier to Review? An Empirical Investigation on Code Change Reviewability. In *Proceedings of the 26th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering*. 2018.

Investigating Type Declaration Mismatches in Python. In *IEEE Workshop on Machine Learning Techniques for Software Quality Evaluation*. 2018.

Supervised Sentiment Classification with CNNs for Diverse SE Datasets. *arXiv preprint arXiv:1812.09653*. 2019.

EXPERIENCE

MICROSOFT RESEARCH | SOFTWARE ENGINEERING INTERN

May 2018 – Aug 2018 | Bangalore, India

Worked on query optimization for COSMOS, Microsoft's production Big Data engine, by developing static analysis tools for queries written in SCOPE, a SQL-like declarative language

INTUIT | SOFTWARE ENGINEERING INTERN

May 2017 – Jul 2017 | Bangalore, India

Developed a data processing engine with parallel query evaluation for layout-based database retrieval and a report generation layer that provides performance insights for businesses 300% faster than an existing internal solution

RESEARCH

UNIVERSITY OF WATERLOO | GRADUATE RESEARCH ASSISTANT

Aug 2018 – Present | Waterloo, Canada

Worked with Prof. Jimmy Lin from the **Data Systems Group** on building deep learning models for natural language processing tasks

UNIVERSITY OF WATERLOO | RESEARCH INTERN

Jan 2018 – May 2018 | Waterloo, Canada

Worked with the **Software Analytics Group** and the **Computational Health Informatics Lab** on hierarchical deep learning models for supervised sentiment analysis on software datasets

DELFT UNIVERSITY OF TECHNOLOGY | RESEARCH INTERN

Aug 2017 – Dec 2017 | Delft, Netherlands

Worked with the **Software Engineering Research Group** on assessing the reviewability and automating the quality evaluation of pull requests

INDIAN BANK | RESEARCH INTERN

May 2015 – Jul 2015 | Chennai, India

Developed environment sensitive time-series forecasting models for setting business targets for the **Planning and Economic Research Division**

EDUCATION

UNIVERSITY OF WATERLOO | ONTARIO, CANADA

M.Math. (Thesis) Computer Science

Cumulative GPA: 4.0 / 4.0

BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE | PILANI, INDIA

B.E. (Honors) in Computer Science, Aug 2018

Cumulative GPA: 3.88 / 4.0 | Major GPA: 3.89 / 4.0

M.Sc. (Honors) in Economics, Aug 2018

Major GPA: 4.0 / 4.0