# ACHYUDH RAM

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#### EDUCATION

# University of Waterloo, Ontario, Canada

M.Math. (Thesis), Computer Science, Expected: August 2020

• Affiliated to the Data Systems Group and the Software Architecture Group

Birla Institute of Technology & Science, Pilani, India

B.E. (Hons.), Computer Science, Graduated with Distinction

• GPA: 9.71/10.0 and Major GPA: 9.73/10.0

M.Sc. (Hons.), Economics, Graduated with Distinction

• Major GPA: 10.0/10.0

#### EXPERIENCE

## Software Engineering Intern, Microsoft Research

May '18 – Aug '18

- Worked on query optimization for COSMOS, Microsoft's production Big Data engine
- Performed static analysis on SCOPE queries and evaluated the analysis on production jobs

#### Research Intern, University of Waterloo

Jan '18 - May '18

• Worked with Prof. Mei Nagappan on the empirical modeling of sentiments in GitHub Pull Request discussions as a part of the THEMIS.COG project

#### Research Intern, TU Delft

Aug '17 - Dec '17

• Worked with Prof. Alberto Bacchelli on assessing the reviewability of code changes and automating the evaluation of GitHub Pull Requests

#### Software Engineering Intern, Intuit

May '17 - Jul '17

- Developed a data processing layer with parallel query evaluation for layout-based database retrieval and a report generation layer to provide performance insights for businesses
- Won HackAttack 2017 by building *Foresight*, an Android app that uses object detection and realtime databases to help the differently-abled navigate better

#### Research Intern, Indian Bank

May '15 - Jul '15

• Developed environment sensitive time-series forecasting models for setting business targets

#### TEACHING

#### Teaching Assistant, University of Waterloo

Sep '17 - Present

• CS 135 - Designing Functional Programs

#### Teaching Assistant, BITS Pilani

Jan '17 - May '17

- $\bullet$  BITS F312 Neural Networks & Fuzzy Logic
- CS F211 Data Structures & Algorithms

# SKILL SET

#### Languages

C, C++, Python, Java, JavaScript, BASH, SQL, HTML, CSS

#### Frameworks

Amazon Web Services, Google Cloud Platform, Firebase, Docker, Scikit-Learn, Numpy, Matplotlib, NLTK, Gensim, Keras, NetworkX, Flask, Scikit-Image, Chart.js

## Publications

# What Makes a Code Change Easier to Review? An Empirical Investigation on Code Change Reviewability 2018

26th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering

#### Investigating Type Declaration Mismatches in Python

2018

IEEE Workshop on Machine Learning Techniques for Software Quality Evaluation

# Talks

#### Google Developer Group, Goa

• Leveraging the power of Virtualization, Docker and the Cloud

Apr '17