

Akash Singh

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EDUCATION

MCGILL UNIVERSITY

MSc IN COMPUTER SCIENCE

Graduated Oct 2018 | Montreal, QC

GPA: 3.6 / 4.0

DR. ABDUL K. T. UNIVERSITY

BTECH IN COMPUTER SCIENCE

May 2014 | Sahibabad, UP

GPA: 4.0 / 4.0

LINKS

Github:// [akashzcoder](#)

LinkedIn:// [akash-singh](#)

Academia:// [AkashSingh](#)

GoogleScholar:// [akashsingh](#)

Quora:// [Akash-Singh-160](#)

SKILLS

PROGRAMMING

Programming Languages:

Python • Java •

Build/Test:

pytest • unittest • junit

DevOps:

AWS • Ansible playbook • Docker

• Docker Compose

CI/CD Tools:

Codeship • conda-forge • Jira

Web Technologies:

Nodejs • Angular 4 • Express

Scripting Languages:

SQL

Web Server:

Tornado • Flask

Methodology:

Agile-Scrum

Databases:

PostgreSQL • MySQL • MongoDB

Version Control:

Git

Pipeline Control:

AirFlow

SOA:

REST API • RabbitMQ • Redis

Dev. IDE:

Pycharm • IntelliJ IDEA

Domain Knowledge:

Insurance • Crowdsourcing



EXPERIENCE

VIA SCIENCE (VIA) | RESEARCH SOFTWARE DEVELOPER

January 2019 - Present | Montreal, QC

- At VIA, I am a part of the product development team working towards development of TAC for a large audience.
- Developed asynchronous REST API calls using Python's Tornado Web Server.
- Extended features in TAC to provide data scientists the facility to execute their algorithm on multiple datasets. Most of my daily work involves working either on the tornado web server or creating or conda packages.
- Wrote scripts for automated integration tests.

MCGILL UNIVERSITY | GRADUATE RESEARCH ASSISTANT

January 2017 - Aug 2018 | Montreal, QC

- Part of the team to develop the most cited product of Citizen Science: **Phylo** (game). My role was to develop the back-end of this game which is used to solve DNA sequence alignment problem for different species. [Also deployed in Science and Technology Museum, Ottawa]
- End-to-end development of **Open-Phylo** which is a platform for scientists to provide input DNA sequences to the game - Phylo.
- I also contributed in multiple research oriented tasks whilst working on the above two products.

COGNIZANT | PROGRAMMER ANALYST

June 2014 - June 2016 | Chennai, TN

- Wrote automation tools to help the project team in achieving its deliverable.
- Developed a thick-client application - xDashboard - using the existing product web services to visualize status of different deployment steps.
- Created a small tool: QC_ID_roster - which was used by my supervisor to track the interim status of change requests.
- PSI services LLC Certified in Risk Management Insurance and Life Insurance

TEACHING ASSISTANT | FALL 2017, 2018 & WINTER 2018

Software Design & Web development | McGill University

- Mentored over 500 students which enhanced my software engineering skills. I also wrote answers to assignments and helped students with their queries.

PROJECTS AND PUBLICATIONS

PUBLICATIONS

- AAAI 2018: Lessons from an Online Massive Genomics Computer Game
- HCOMP 2018: A human-computation platform for multi-scale genome analysis
- IJEDR 2014: Chaos Based Cryptosystem for Images
- IEEE 2014: Debit /ATM card security based on chaos function and QR code

PROJECTS

- Open-Phylo | Github: <https://git.io/fjROQ>
- Phylo game | Github: <https://git.io/fjRO7>
- ICLR Reproducibility challenge | Atlassian link
- Letter based language identification | Atlassian link