# **Chris Gravel**

EXPERIENCE

one

• Did more stuff

## **EDUCATION**

## Netaji Subhash Engineering College

Kolkata, India

Email

Bachelor of Technology - Information Technology; GPA: 7.27

July 2016 - June 2020

Courses: Operating Systems, Data Structures, Analysis Of Algorithms, Artificial Intelligence, Machine Learning, Networking, Databases

## SKILLS SUMMARY

• Languages: Python, PHP, C++, JavaScript, SQL, Bash, JAVA

• Frameworks: Scikit, NLTK, SpaCy, TensorFlow, Keras, Django, Flask, NodeJS, LAMP

• Tools: Kubernetes, Docker, GIT, PostgreSQL, MySQL, SQLite

Platforms: Linux, Web, Windows, Arduino, Raspberry, AWS, GCP, Alibaba Cloud, IBM Cloud
 Soft Skills: Leadership, Event Management, Writing, Public Speaking, Time Management

### EXPERIENCE

# Google Summer of Code - Submitty

Remote

Student Developer (Full-time)

May 2019 - Sep 2019

- o Discussion Forum Upgrades: Refactor forum for performance to handle large databases.
- o REST API for Discussion Forum: Symphony & Twig based Forum parts converted to API-first interface.
- Ratchet PHP WebSocket: Implemented a WebSocket for low-latency real time exchange of posts and thread updates.
  DataCamp Inc.

Instructor (Part-time, Contractual)

Dec 2018 - Present

- Project Course Find Movie Similarity from Plot Summaries: Created project based course using Unsupervised learning and natural language processing.
- o **Tutorial Introduction to Reinforcement Learning**: Created tutorial for Q-learning RL algorithm and concepts.
- o Impact: Course has been taken by 250+ students so far with 4.65 average rating.

# PROJECTS

- Vison multimedia search engine (NLP, Search Engine, Web Crawlers, Multimedia Processing): (Work in progress) Research oriented, open source, search engine for bringing reverse multimedia search to small & mid scale enterprises. Tech: Python, NodeJS, Intel OpenVino Toolkit, Selenium, TensorFlow (October '18)
- Reinforcement Learning based Traffic Control System (Reinforcement Learning, Computer Vision): Al model to resolve city traffic around 50% faster. Tech: Python, Alibaba Cloud, Raspberry Pi, Arduino, SUMO & OpenCV. (August '18)
- Panorama from Satellite Imagery using Distributed Computing (Distributed Computing, Image Processing): Images clicked using drones, provided by ISRO were stitched together using distributed public compute nodes, effectively bringing down processing time exponentially. Tech: PHP, C++, Java, Python (March '18)
- Drag-n-drop machine learning learning environment (Web Development, Machine Learning): Scratch like tool for implementing machine learning pipelines along with built in tutorial for each concept. Tech: Python, JavaScript (September '18)
- Search Engine and Social Network(Web Development, Web Crawler, Search): Created from scratch a social network and a search engine based on the idea of integrating Facebook and Google. The launched website was among top 1000 websites in India during 2012-2013. Tech: PHP, MySQL, HTML, CSS, WebSockets, JavaScript, RSS, XML (May '12)

### Publications

- Book: Deep Learning on Web (Web Development, Deep Learning): Work in Progress book to be published by Packt Publishing in late 2019. Tech: Django, Python, AWS, GCP, Azure (November '18)
- Book: Deep Learning on Mobile Devices (Flutter App Development, Deep Learning): Work in Progress book to be published by Packt Publishing in late 2019. Tech: Flutter, Android, Firebase, TensorFlow, Python, Dart (December '18)

# Honors and Awards

- Awarded title of Intel Software Innovator May, 2019
- Second Runner's Up at TCS EngiNx Engineering Project Innovation Content September, 2018
- Runner's Up at Facebook Developers Circle Hackathon August, 2017

## Volunteer Experience

# Community Lead at Developer Student Clubs NSEC

Kolkata, India

Conducted online and offline technical & soft-skills training impacting over 3000 students.

Jan 2019 - Present

## Event Organizer at Google Developers Group Kolkata

Kolkata, India

Organized events, conducted workshops and delivered workshops reaching over 7000 developers.

Jan 2018 - Present