Amit **Kumar**

SOFTWARE ENGINEER

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Experience

Aire Labs
London, United Kingdom

SOFTWARE ENGINEER PYTHON (CONTRACT)
Jan 2020 - Present

- Software Engineer in the Lenders Squad.
- Wrote infrastructure deployed on AWS Lambda, AWS Transfer, VPC using Terraform
- Building Services and Infrastructure to support Lender side of the Aire's Credit assessment service.

Turner & Townsend
London, United Kingdom

SOFTWARE ENGINEER PYTHON (CONTRACT)
Jan 2019 - Dec 2019

- Software Engineer in the Lenders Backend team
- Software Engineer in the Backend team
- Building API's using Flask
- Building data pipelines using Airflow on Azure Platform
- Code review and mentoring.

Cambridge Medical Robotics
Cambridge, United Kingdom

SOFTWARE ENGINEER PYTHON (CONTRACT)
June 2018 - Dec 2018

- Worked on the System Testing Infrastructure of the Surgical Robot.
- Reporting, diagnosing and fixing software issues in the Robot
- Responsible for mentoring and code review.

The Telegraph
London, United Kingdom

SOFTWARE ENGINEER (PYTHON), DATA PLATFORM TEAM
February 2018 - May 2018

- Created numerous ETL pipelines.
- Improved Deployment Infrastructure with Jenkins.
- Improved Standardization of Python Projects.
- Upgraded ETL pipeline creation to from Python2 to Python 3
- Review Code to provide feedback for improving design and code quality
- Automated creation of new pipelines on GCP (Google Cloud Platform) via Jenkins to facilitate one-click infrastructure to help developers focus on code rather than infra.

Powervault
London, United Kingdom

SOFTWARE ENGINEER (PYTHON), BACKEND TEAM
Oct. 2017 - Feb. 2018

- Software Engineer in the backend Team, worked on the IoT infrastructure.
- Created setup for Continuous Integration on gitlab.
- Dockerized Projects for Continuous Delivery.
- Integrated external services to use/control Powervault devices.
- Improved their Client facing dashboard and API, written in Flask and Django

Zomato
Gurgaon, India

SOFTWARE DEVELOPMENT ENGINEER (PYTHON, PHP)
Oct. 2016 - Oct. 2017

- Software Engineer in the ML/Reviews Team.
- Updated the User Credibility to incorporate two way movement of credibility score based on user activities, using a rule based system.
- Re-wrote the ratings/reviews spam detection rule based system.
- Created a Cuisine Predictor, which predicts the cuisine of a restaurant based on the dishes it serves.
- Created Various internal dashboards for automated creation of collections (collection of restaurants) using Review Highlights.
- Wrote the data pipeline of the Image Quality prediction.
- Revamped the Review Moderation system in a team of two.
- Improved Testing culture for Python as well as PHP Projects.
- Created the testing infrastructure for the main web application by writing a wrapper around PHPUnit and setup travis.

HackerEarth *Bangalore, India*
SOFTWARE ENGINEERING INTERN, R & D TEAM *June. 2016 - Sep. 2016*
- Facilitated the collection of standard error logs
- Wrote an Error Log Parser for C, C++, Python and Java.
- Wrote a Checker for comparing user output with expected output to give appropriate suggestion for frequently occurring cases.

Google Summer of Code 2015 *Remote*
STUDENT DEVELOPER UNDER PYTHON SOFTWARE FOUNDATION (SYMPY) *May. 2015 - Aug. 2015*
- Improved Mathematicalrobustness of new solvers module.
- Implemented Complex Sets: Representing infinite solutions in the argand plane
- Linear System solver, Differential Calculus Methods.

Google Summer of Code 2016-2020 *Remote*
MENTOR FOR SYMPY, SYMENGINE (OPEN SOURCE PROJECTS) *Summer 2016, 2017, 2018, 2019, 2020*
- Mentored students for the development of solvers in SymPy and SymEngine.

Technical Skills

Languages

PYTHON (PROFICIENT), PHP, SQL (INTERMEDIATE), C, C++, JAVASCRIPT, HTML/CSS, BASH (FAMILIAR)

Tools, Framework & Methodologies

FLASK, DJANGO, DOCKER, REST API, SWAGGER, REDIS, GIT, TDD, TERRAFORM, VIM

Operating System

MAC OS, LINUX (UBUNTU)

Education

Delhi Technological University *New Delhi, India*
BACHELOR OF TECHNOLOGY IN MATHEMATICS AND COMPUTING ENGINEERING *Mar. 2012 - 2016*

Presentations Delivered

2018	**Swiss Python Summit**, Let's Talk About GIL (v3)		*Raperswill, Swiss*
2018	**PyData London**, Data Pipelining with Luigi		*London, UK*
2017	**PyParis, France**, Python in Maths Class (Lightning Talks)		*Paris, France*
2017	**PyCon, CZ**, Let's Talk About GIL!		*Prague, CZ*
2016	**PyCon UK**, Introducing Metaclasses		*Cardiff, UK*
2016	**PyCon Asia Pacific**, Demystifying Python's Method Resolution Order		*Seoul, Korea*
2016	**PyGotham**, Demystifying Python's Method Resolution Order		*NewYork, US*
2016	**SciPy**, SymPy Tutorial		*Austin, US*
2015	**PyCon India**, SymPy Tutorial		*Bangalore, India*

Honors & Awards

INTERNATIONAL

2016	**Exceptional Talent in Technology (Endorsement)**, by Tech City UK (Government of UK)	*Tier 1 Visa 2017*
2016	**Financial Aid Award**, Presentation on SymPy	*SciPy 2016*
2015	**SemiFinal**, HackerRank WorldCup coding competition (Team size: 2)	*Remote*

DOMESTIC

2012	**Top 1% of 1.3 million**, AIEEE (Engineering Entrance Exam) 2012	*India*

Open Source Contributions

Packages/Tools

SymPy (Core Developer), SymEngine, CPython, pandas-gbp, facebook-prophet, pydsa

Publications

PeerJ Computer Science, 2017. PeerJ.   *Citations: 177*

SymPy: Symbolic computing in Python   *2017*

Program Committees

2018	**Co-Organizer**,	PyLondinium	*London*
2016 - Pr.	**Co-Organizer**,	Python Delhi User Group	*Delhi*
2018	**Co-organizer**,	PyData London User Group	*London*
2016	**Co-organizer**,	PyCon India	*Delhi*