

# Amit Kumar

+44-7904-296-365  
dtu.amit@gmail.com

in /iaktech  
/aktech  
iamit.in

## Experience

### Quansight

Senior Software Engineer

May. 2020 – Present

Remote, London

- > Contributed extensively to infrastructure of Nebari an Open science data science platform.
- > Algorithms contributed in sgkit for GPU, resulting in 10x performance improvement.
- > Worked on various backend client projects in Flask/Django/FastAPI.
- > Created a JupyterHub Extension to spawn arbitrary apps like Streamlit, Gradio, Panel etc.
- > Contributed to numerous Data Engineering, Data Science Infrastructure, Backend, Finance client problems using tools in PyData Ecosystem like Dask, Numba, RAPIDS, etc.

### Cirun.io

Founder & CEO

June 2020 – Present

Remote

- > Created a CI/CD service to run GitHub Actions on 6 cloud providers including OpenStack.
- > Used by 150+ Private and Public Projects, with several paying customers.

### Aire Labs (Contract)

Software Engineer

Jan. 2020 – Mar. 2020

London, UK

- > Designed and implemented client data sharing service and infra for credit assessment system.
- > Wrote micro service for client assessment using AWS Lambda.

### Turner & Townsend (Contract)

Software Engineer

Jan. 2019 – Dec. 2019

London, UK

- > Designed and implemented numerous API's to make construction data accessible to the business.
- > Lead the standardization of design and implementation of Data Pipelines using Airflow.

### Cambridge Medical Robotics (Contract)

Software Engineer

Jun. 2018 – Dec. 2018

London, UK

- > Designed and implemented a System Testing Infrastructure of a component of the Surgical Robot.
- > Responsible for Code Review/Mentoring and reporting, diagnosing and fixing software issues in the Robot.
- > Lead the standardization of design and implementation of Data Pipelines using Airflow.

### The Telegraph

Software Engineer, Data Platform

Feb. 2018 – May. 2018

London, UK

- > Designed and implemented numerous ETL pipelines, improved deployment Infrastructure with Jenkins.
- > Improved standardization of Python Projects and lead the migration of Python2 to Python3 for ETL pipelines.

### Powervault

Software Engineer, Backend

Oct. 2017 – Feb. 2018

London, UK

- > Integrated external services to control IoT devices and improved usability of client facing dashboards.
- > Dockerized the backend stack and implemented CI/CD on GitLab for 1-click test and deploy.

## Zomato

Software Development Engineer

Oct. 2016 – Oct. 2017

Gurgaon, India

- › Improved user credibility system and rewrote a rule based spam detection system.
- › Created numerous internal dashboards for visualization.
- › Wrote data pipeline for image quality prediction and a cuisine predictor using word embeddings.

## Google Summer of Code 2015-2020

Python Software Foundation, SymPy

Summer 2015

Remote

- › Improved Mathematical robustness of new equation solvers module in SymPy.
- › Implemented Complex Sets: Representing infinite solutions in the argand plane.
- › Linear system solver, differential calculus methods.
- › Mentored students in Google Summer of Code 2016-2020 under SymPy.

## Education

### Delhi Technological University

Bachelor of Technology in Mathematics and Computing Engineering

2012 – 2016

New Delhi, India

## Presentations

### Talks and Presentations

Meetups and Conferences

2016 - 2022

- › I have spoken at numerous meetups and conferences, all of them can be seen here: [iamit.in/talks](https://iamit.in/talks)

## Projects

**cirun.io** A service to create Github Actions CI runners on AWS, GCP, Azure, Oracle, OpenStack, DigitalOcean.

**codecinema.io** A tool to create and share beautiful images and videos of code.

**ufo.camera** Fetches random images of UFO from National UFO Reporting Center.

**gitspace.io** Calculates the storage space occupied by user's public GitHub repositories.

## Skills

**Languages** Python, JavaScript, HTML/CSS, Bash, Java (Familiar), C, C++ (Familiar)

**Tools, Technology & Platform** Flask, Django, FastAPI, Docker, K8s, REST API, Git, TDD, Terraform, React, SQL, AWS, GCP, Azure, OpenStack, Nginx, Traefik, Dask, JupyterHub, Pytest, etc

## Honors & Awards

**Exceptional Talent in Technology (Endorsement)** by Tech City UK (Government of UK)

**Financial Aid Award** Presentation on SymPy at SciPy 2016

**SemiFinal** HackerRank WorldCup coding competition (Team size: 2)

## Open Source Contributions

- Nebari (Core Developer), SymPy (Core Developer), Panel, sgkit, pyflyby, jhub-apps, SymEngine, SymPy-Gamma, Papyri, Dask Gateway, NumPy, Flask-Caching, CPython, pandas-gbp, facebook-prophet, pydsa