# Anubhav Patel

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### Education

Indian Institute of Information Technology Kalyani BTech in Computer Science Expected 2021 | Kolkata, India Cum. GPA: 9.6

### Kendriya Vidyalaya IIT Mumbai

Mumbai, India

### Links

Github://anubhavp28 LinkedIn://anubhavp28 Codechef://anubhavp28 Blog://anubhavp28

### Skills

### **Programming**

Python • C • C++ • SQL • MongoDB Assembly • Lagent Bash Scripting Linux • Flask • Django • OpenCV

### Hackathons

#### InOut 6.0

Among top 75 teams selected to attend the onsite event.

Created an VR app tp help children learn the fundamentals of programming by creating 3D stories and animations.

#### Hack-A-Bit 2018

6th Prize Winner (out of 50 teams)

Created a news aggergator that informs users of biased content inside news articles.

### Work Experience

IISc Bangalore Research Intern, Robotics Innovation Lab (Winter '19) Research, Computer Vision, Deep Learning, OpenCV, Keras

- Researched and developed a method to determine dimensions of an object from 2D image for the application of automatic mixed palletization in warehouses. Wrote a research paper on the same.
- Researched and developed a deep learning based method to identify incoming and outgoing items in a warehouse from 2D image for the application of warehouse automation. Wrote a research paper on the same.

# **Google Summer of Code : Scrapy Project** (Summer '19) Python, Tox, Travis

- Created and implemented an interface for robots.txt parsers in Scrapy (an open-source python based web scraping framework), allowing users to substitute a more spec compliant parser than the default one.
- Implemented the interface on top of 3 popular existing robots.txt parsers, allowing the majority of Scrapy users to make the switch without having to write a single line of code.
- Developed a fully spec compliant pure-Python robots.txt parser which is also compatible with google's newly proposed robots.txt specification. The parser will become the default in the next release of Scrapy.

# **The Bomway** Full-Stack Developer - Intern (Winter '18) Flask, MongoDB, Bootstrap, Python, JavaScript, HTML, CSS

- Implemented a shopping cart with support for multiple payment gateways, the option to offer discounts on a group of products, ability to calculate international shipping cost, and elegant user interface, which resulted in savings of \$3000 every year by replacing the third-party cart plugin.
- Implemented an service to lazily resize images on user request with Amazon S3 as storage backend.

### Projects

### Full Text Search and Indexing Server Link

Golang, Mux

• Created a service in Golang which provides the ability to search for a word or group of words, inside large quantity of text spread across multiple documents using an inverted index, utilised it to create a service for searching inside large number of research papers on my college's local network.

### **URL Shortening Service Link**

Python, Redis, Postgresql, SQLAlchemy, Flask, Docker

- Created a URL shortening microservice built on top of Redis and Flask, utilized Postgresql as a persistent store to mitigate data loss due to failures.
- Utilized docker to containerize the service and allow for easy deployment.

### Coursework

#### Undergraduate

Design And Analysis of Algorithms
Object Oriented Programming
Operating Systems
Computer Organization and Architecture
Compiler Design
Artificial Intelligence
Numerical Methods
Formal Language and Automata Theory
Data Structures
Programming with C
Discrete Maths
Probability and Statistics

#### **VR-Play Link**

A-frame, Google Cardboard, JavaScript, HTML, CSS

- Created a virtual reality based visual programming language (similar to Scratch) for creating 3D stories, animations and games, with the primary objective to help children between the age of 8 to 16 in learning fundamentals of computer programming (loops, conditions, algorithms, etc).
- Built the entire project in a short time span of 24 hours during India's largest community hackathon InOut 2019.

#### Gitstalk Link

NodeJS, GitHub REST API

• Created a command line tool that provides detailed activity log of a GitHub user. Utilised GitHub REST API to fetch data about the user.

#### TVFPlay-dl Link

Python, Requests

 Created a command line tool to download videos from TVFPlay (https://tvfplay.com) video streaming service, allowing users to enjoy their awesome content even on slow or flaky internet connection.

#### Website for Placement Cell Link

PHP, PHPMailer, MySQL, HTML5, CSS3, JavaScript

- Designed the database schema and implemented backend using PHP and MySQL, for registering companies.
- Implemented automatic emailing facility using SMTP.
- Designed and implemented a responsive frontend for the website.

#### Website for Literary Club - Udaan Link

HTML5, CSS3, SVG Animation, Slick, AOS.css

- Created a elegant looking website for IIIT Kalyani's literary club.
- Implemented Animation on inline-SVG with CSS.

### Certificates

2019	Udemy	Web Development with Go (golang) Programming Language	
2019	Udemy	Natural Language Processing in Python	
2018	NPTEL	Design And Analysis of Algorithms	
2018	NPTEL	Programming, Data Structure And Algorithms in Python [Top 1%]	
2018	NPTEL	Programming, Data Structure And Algorithms in C [Top 5%]	

### Achievements

- Awarded Bertelsmann Tech Scholarships among 50,000 applicants.
- Ranked 96th among 350 teams at ICPC Asia Amritapuri Site 2019.
- 5 star rated user on Codechef.
- Among Top 50 students (all over India) in IIIT Hyderbad's Lateral Entry Entrance Examination.

### Position of Responsibility

2018-Present	Technical Adviser	Technical Committee of IIIT Kalyani
2018-Present	Founding Member	Open-Source Club of IIIT Kalyani
2019-Present	Memeber	Institute's Innovation Counil