# Anubhav D. Patel

### anubhavp28.github.io

anubhavp28@gmail.com | +91 9082079014

# **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 Medium://anubhavp28

# HACKATHONS

#### HACK-A-BIT 2018

6th Prize Winner (out of 50 teams)

Created a news aggregator that mitigates the effects of media bias by providing the users with all of the perspectives on news. Additionally, it uses machine learning to classify news articles as 'partial' or 'impartial'.

### HUMBLEFOOL CHARITY HACKATHON 2017

Successful Participation

# SKILLS

#### **PROGRAMMING**

Python • C • C++ • JavaScript • Octave CSS • PHP • MySQL • MongoDB • PostgreSQL • Redis • HTML • Assembly • £TEX• Bash Scripting • Linux • Flask • Django

Familiar:

Android • Node JS • Flectron

## **WORK EXPERIENCE**

#### THE BOMWAY | FULL-STACK DEVELOPER - INTERN

Dec 2018 – Present | Flask, MongoDB, Bootstrap, Python, JavaScript, HTML, CSS

- Implemented a e-commerce shopping cart with support for multiple payment gateways, the option to offer discounts, ability to calculate international shipping cost, and elegant UI.
- Implementing an backend service to provide a single interface to UploadCare CDN and Amazon S3.
- Performed Search Engine Optimization for their website.
- Discovered and fixed two distinct vulnerabilities concerning user authentication and order placement, in their codebase.

# **PROJECTS**

### WIDESCALE | FULL-TEXT SEARCH SERVICE | LINK

Golang, Mux

- Created a full-text search service in golang. It provides ability to search for words or group of words, inside large quantity of text spread across multiple documents.
- Internally, it utilizes an Inverted Index (similar to ElasticSearch and Lucene), allowing it to perform well even with large number of documents.

#### SHORTIFY | A URL SHORTENING MICROSERVICE | LINK

Python, Redis, Postgresql, SQLAlchemy, Flask, Docker

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

# NEWS AGGREGATOR THAT HELPS MITIGATE THE EFFECTS OF MEDIA BIAS ON USERS | Link | For HACK-A-BIT 2018 HACKATHON

Python, Flask, Requests, Requests-HTML, TextBlob, FakeBox, JSON, Sqlite3, HTML, CSS

- Created a News Aggregator Progressive Web App, that utilized Machine Learning and Sentiment Analysis to classify news article as 'impartial' or 'partial'.
- Any search made through the app, returns news articles in a way that tries to cover all the perspectives on news available.
- Finished as the 6th highest ranked team at HACK-A-BIT 2018 (out of 50 teams selected from all over India).

#### PLACEMENT PORTAL | 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.

# COURSEWORK

#### **UNDERGRADUATE**

Design And Analysis of Algorithms Computer Organization and Architecture Formal Language and Automata Theory Data Structures Programming with C Discrete Maths Probability and Statistics

#### **UDAAN** | Website For Literary Club | 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.

#### TVFPLAY-DL | LINK

Python, Requests

• TVFPlay-dl is a command line tool to download videos from TVFPlay (https://tvfplay.com).

#### PAPERVAULT | LINK

HTML, CSS, JavaScript

• Papervault is a archive of previous year question papers of IIIT Kalyani and accompanying website to simplify searching of the archive.

Other projects include: Pacman clone, Website For Open-Source Club.

## RESEARCH

# CHARACTER RECOGNITION USING BINARY IMAGE DECOMPOSITION | Under Prof.Sanjoy Pratihar, IIIT Kalyani

Aug 2018 - Present

- Studied different algorithms for rectangular binary image decomposition ( Run-length encoding, Generalized Delta Method, Quad-tree decomposition, Graph-based decomposition)
- Currently, working on finding the feasibility of creating an OCR system that can recognize character using this decomposition.

# **OPEN SOURCE CONTRIBUTIONS**

# **SCIPY** | LIBRARY FOR SCIENTIFIC COMPUTATION Python

- Applied for SciPy in GSoC with proposal LINK.
- Improved documentation for integrate module.

#### ORIGAMI.JS | LIBRARY TO DRAW ON HTML5 CANVAS

HTML5 Canvas, JavaScript

• Implemented a bar charting method lacking in OrigamiJS.

Other organizations I have contributed to includes: FOSSASIA, Processing Foundation.

# **ACHIEVEMENTS**

- Member of 6th highest ranked team at on-site event of HACK-A-BIT 2018 Hackathon.
- 4 star rated user on Codechef.

# CERTIFICATES

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%]

# POSITION OF RESPONSIBILITY

2018	Technical Adviser	Technical Committee of IIIT Kalyani
2018	Founding Member	Open-Source Club of IIIT Kalvani