

# Parimal Prasoon

<https://parimal.codes>  
[parimalprasoon7@gmail.com](mailto:parimalprasoon7@gmail.com)

## EDUCATION

### VIT BHOPAL UNIVERSITY

B.TECH IN COMPUTER SCIENCE AND  
ENGINEERING

Expected May 2021

## WORK EXPERIENCE

### KWIKPIC | SOFTWARE

ENGINEERING INTERN

Jan 2021 - Present

- Implemented Django middleware to restrict access to views based on IP addresses.
- Integrated Django Channels into the product to make use of web-socket connections as well as background worker processes to offload tasks.

### GOHIRED | TECHNICAL CONTENT CREATOR

Oct 2019 – Jan 2020

- Created articles and tutorials on algorithmic questions asked in technical interviews.

## LINKS

GitHub:// [Parimal7](#)

LinkedIn:// [parimal7](#)

Codechef:// [parimal7](#)

HackerEarth:// [@parimal\\_7](#)

HackerRank:// [pairmal7](#)

## COURSEWORK

- Data Structures and Algorithms
- Operating Systems
- Artificial Intelligence
- Computer Networks
- Database Management Systems
- Design and Analysis of Algorithms

## SKILLS AND INTERESTS

### Programming Languages

C • C++ • Python • Java • JavaScript

### Tools

Vim • CMake •  $\LaTeX$  • Git • Heroku

### Frameworks

Django • SFML

### Databases

MySql • SQLite

## TECHNICAL PROJECTS

### RAW IMAGE PROCESSOR | DIGITAL IMAGE PROCESSING | GITHUB LINK

- Built a C++ application which converts RAW file format generated by digital cameras into a bitmap file.
- Implemented linear interpolation for debayering the RGB image.
- Added dynamic linking to reduce executable file size.
- Created a CMake script to build the full project.

### CHESS BOT | ARTIFICIAL INTELLIGENCE | GITHUB LINK

- Built a chess playing bot in JavaScript. Used libraries chess.js for move generation and chessboard.js for board visualization.
- Implemented mini-max algorithm for decision making, searching up to a depth level of three.
- Optimized the algorithm using alpha-beta pruning.

### PORTFOLIO WEBSITE | WEB DEVELOPMENT | WEBSITE LINK

- Created a portfolio / blog web application from scratch using the Django framework.
- Integrated markdown editor for better text editing and rendering through Django admin.
- Deployed the site on Heroku.

### SQLITE-CLONE | DATABASES | GITHUB LINK

- Programmed a database from scratch in C programming language.
- Added persistence to disk and cursor abstraction for tracking rows.
- Implemented B+ tree from scratch for efficient insertion and searching.

### PATHFINDING VISUALIZER | ALGORITHMS | GITHUB LINK

- Created a desktop application to find shortest path from source to destination in a given map.
- Implemented Dijkstra's and A\* algorithms from scratch for pathfinding using C++.
- Built the graphical user interface using SFML.

### WEB SERVER | COMPUTER NETWORKS | GITHUB LINK

- Implemented a simple web server in Python that can handle concurrent connection requests.
- Added Python Web Server Gateway Interface support.
- Solved the problem of zombie processes by implementing a signal handler and wait system call.

## PROGRAMMING COMPETITIONS

2020	19 <sup>th</sup> /630	Data Structures and Algorithms, HackerEarth
2019	543 <sup>th</sup> /20,000+	Codechef August Long Challenge, 2019
2019	223 <sup>th</sup> /6,000+	Codechef May Long Challenge, 2019