

# KALYAN CHIRLA

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Github | LinkedIn | Codechef | Hackerrank

## EDUCATION

### University of Leeds

Master of Science in Advanced Computer Science

Recent Coursework: Artificial Intelligence, Data Science, Cloud Computing

Jan '21 - Present

Percentage: 78.3%\*

### BML Munjal University

Bachelor of Technology in Computer Science

Relevant Coursework: Data Structures, OOPS, Distributed Systems, Advanced Analysis of Algorithms

Aug '16 - Jun '20

Grade: First Class

## WORK EXPERIENCE

### Software Intern | Hence Data Innovations Pvt. Ltd.

Technologies: Selenium WebDriver, Java, TestNG, Maven

Jan '20 - May '20

Hyderabad, India

- Worked on writing automation test cases for Times Manager Application
- Enhanced the system to periodically run tests and performed rerunning of tests to prevent false negatives

### Research Intern | Indian Institute of Technology, Kharagpur

Technologies: Algorithms, Graph Theory, NP-Completeness, C++

May '18 - Jul '18

Kharagpur, India

- The objective was to analyze the problem of Burning graphs and finding the min. time to burn a graph
- Implemented a heuristic-based approach to solve the problem on randomly generated graphs
- Compared the burning numbers of a large number of randomized graphs to estimate the approximate value of burning number for any graph given the number of vertices and edges

## PROJECTS

### Content Aware Image Resizing

[Image Processing, Python, Dynamic Programming, PIL]

Code: [github.com/kalyanchirla/Content-Aware-Image-Resizing](https://github.com/kalyanchirla/Content-Aware-Image-Resizing)

- Built an image resizing module which reduces the height and width of any image preserving the important content of the image using the seam-carving algorithm
- Enhanced the project by adding an extra module to remove any selected object in the image

### Driver Alertness Detection

[Machine Learning, Data Analysis, Python]

Code: [github.com/kalyanchirla/Driver-Alertness-Detection](https://github.com/kalyanchirla/Driver-Alertness-Detection)

- Utilized the training data to detect if a driver is alert or not
- Performed data cleaning and exploratory data analysis to identify outliers and correlations in data
- Achieved best accuracy of 99.51% using Random Forests after hyperparameter tuning

### Automatic Code Evaluator

[Algorithms, Graph Theory, OOPS]

- Developed an application which automatically evaluates the user code for any given question
- It can point out the part of code where the user has made a mistake and therefore helps in debugging
- Checks plagiarism by going through the control flow of code using subgraph isomorphism

## TECHNICAL SKILLS

### Programming Languages

C/C++, Python, Java, Javascript

### Software and Frameworks

Pytorch, Sklearn, PySpark, Flask, MySQL, PostgreSQL, REST API

### Tools and Technologies

Git, Machine Learning, Computer Vision, Deep Learning

## ACHIEVEMENTS

- Achieved a global rank in the top 6<sup>th</sup> percentile in March Challenge 2019 Div 2 on Codechef
- Solved over 1000 coding questions across various coding websites
- Featured as TopCoder of the week on SPOJ: Every week SPOJ releases list of coders who have scored most points in the last week