


# Dev Kumar


Chicago, IL | [G dkumar16@hawk.iit.edu](mailto:dkumar16@hawk.iit.edu) | [+1 312 532 8223](tel:+13125328223) | [in LinkedIn](#) | [My Website](#)

## EDUCATION

### ILLINOIS TECH

 MASTER OF COMPUTER SCIENCE  
8/23 - 4/25, Chicago, Illinois

### NIT CALICUT

 B-TECH COMPUTER SCIENCE  
7/17 - 6/21, Calicut, Kerala  
Cum. GPA: 8.25 / 10.0

## SKILLS

### PROGRAMMING

C • C++ • Java • Python • NASM  
• CudaC++ • OpenMP • Pthread  
• EXPL • XSM • CGAL • OPENGL  
• Verilog • HTML • CSS • Javascript •  
MongoDB • Express • NodeJS • React

### TECHNICAL SKILLS

Machine Learning • Object Oriented  
Programming • MySQL • SAP • GIT

### POWER SKILLS

Problem Solving • Creativity  
• Assertiveness • Critical Thinking  
• Teamwork

## LINKS

Github:// [devthedevel](#)  
LeetCode:// [dev\\_kumar\\_dklv](#)  
GFG:// [devkumar9](#)  
Codechef:// [dev b170514cs](#)  
Codeforces:// [dev kumar](#)

## CO-CURRICULAR

Conducted Hack-a-Holic for TechFest  
Tathva 2020 (LAMP Stack)  
Competitive Programming, Cricket, Gym

## COURSEWORK

Machine Learning, Probability, Statistics  
Linear Algebra, Complex Analysis  
Design & Analysis of Algorithms,  
Data Structures and Algorithms, DBMS  
Computer Networks, Software Eng.  
Operating System, Compiler Design,  
Computational Geometry

## EXPERIENCE

### TATA STEEL | MANAGER IT PROJECTS, FULL STACK DEVELOPER

Aug 2021 - July 2023 | WFH

- Was responsible for obtaining project requirements from the business (within Tata Steel), proposing a high-level design, and implementing the project.
- Designed & developed portal for Relocation of goods, Medical Reimbursement end to end in MERN (React for frontend, Node.js, Express for Backend) Stack.
- Comprise of a mail chain system, delivers required mail at each step.
- Single handedly digitalised Learning and Development systems of Tata Steel like POST & PRE IRIS, School of Excellence, Coaching and Mentoring, Vocational Training of NOPRs, ECBS process by developing Web apps in MERN Stack.

## PROJECTS

### MUSIC PLAYER | HTML, CSS, JAVASCRIPT | LINK | Sourcecode

- Designed a web based music player with basic functionalities like play, pause, next, prev etc.

### EXPERIMENTAL OPERATING SYSTEM | XSM, EXPL | Sourcecode

7/2019 - 11/2019 | Nit Calicut

- Developed a toy OS with basic features from scratch (2000 Lines of Code)
- Functionality Schedule Processes in OS, Allocate Resources, take Console Input and give Console Output, Disk Interrupt Handler, Exception Handler, Forking a process, support 16 Processes and 32 Semaphores etc.

### HAND WRITTEN DIGIT PREDICTION | PYTHON | Sourcecode

- Implemented a neural network from scratch in Tensorflow to predict a given digit by using MNIST dataset of handwritten digits from Kaggle.

### TWITTER SENTIMENT ANALYSIS | PYTHON | Sourcecode

- After text-preprocessing by NLP, implemented Naive Bayes Theorem & Laplace transformation from Scratch to predict the Sentiment of a user.
- By using US Airline Sentiment dataset.

### 16 BIT RISC PROCESSOR | VERILOG | Sourcecode

- Implemented a primary processor which computes the four most basic arithmetic operations addition, subtraction, multiplication and division.

### GOOGLE STOCK PRICE PREDICTION | PYTHON | Sourcecode

- Used LSTM RNN and Keras, Tensorflow packages to predict next two month's stock price of Google. Dataset taken from Kaggle.

## RESEARCH

### NIT CALICUT | MAJOR PROJECT | Sourcecode

Oct 2020 - Mar 2021 | Calicut, Kerala

Worked with **Dr. Jay Prakash** and **Dr. Sudeep K S** to create a recommendation system which has at least 7% more accuracy than naive recommendation system and do a comparison based study among available machine learning models by comparing their RMSE values on Netflix dataset.

### PUBLICATION [Paper Link]

- [1] Dev Kumar, "Comparative study of movie recommendation system using feature engineering and improved error function," in: Proceedings of the 2021 IEEE Conference ISBN: 978-1-6654-5047-8 DOI: 10.1109/INCOFT55651.2022.10094480  
 [Presentation Certificate]