

# AMAN KUMAR

Fourth Year Undergraduate, IIIT Nagpur

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## EXPERIENCE

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Software Engineering Intern

**The Solar Labs**

May 2019 – Present      Noida, India

- Developed automation scripts for generating reports and simulations.
- Implemented CUDA architecture in the core computation module of the Studio application.
- Developed and deployed controller APIs and scripts to server.

## SKILLS

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C, C++, PHP, Python, Java

HTML, CSS, Javascript, Bootstrap

Apache Tomcat, Git, Flask, XAMPP

MySQL, MongoDB

Linux, Windows

## EDUCATION

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Bachelor of Technology

**Indian Institute of Information Technology, Nagpur**

June 2016 – May 2020

Senior Secondary

**Lucknow Public School : 91.8%**

June 2014 – May 2015

Secondary

**Lucknow Public School : CGPA 9.6**

June 2012 – May 2013

## PUBLICATIONS

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- Aman Kumar, Braj Kishor, Sovan Samanta. A study on relation between mathematics and music.

## ACHIEVEMENTS

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- Chief Technical Coordinator of college 2018-19.
- Library Manager project was deployed on College LAN server.
- Content Bucket project was deployed on College LAN server.
- Won I prize in Institute Gathering Quiz 2017.
- Represented IIIT Nagpur in Inter-IIIT in Basketball 2016, 2019.

## HOBBIES & INTERESTS

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- Reading Books, playing PC games, Basketball, Music.
- Bird watching, 3D modelling using Blender.
- amanalphakumar.blogspot.com amanalphakumar

## PROJECTS

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### Student Record System

- Implemented a record keeping system for students. Concepts used: Data Structures, Linked Lists, Dynamic Memory Allocation.
- C, C++.

### Kalman Filters

- Implemented and tested the program to smoothen the input to KNN classifier model using Kalman filters.
- Motive was to improve the accuracy of Bayesian Learning model through denoising the input data.
- Python.

### Library Manager

- Created a Web Application which provides control over day-to-day Library operations.
- Features include: Students/Admin accounts, Viewing book's quantity, Adding book review, Requesting book, Issue History.
- HTML, CSS, PHP, Javascript, MySQL, XAMPP.

### Swasthya App

- Developed database services and APIs for Android application which provided a Disease index of a state.
- HTML, CSS, PHP, MySQL, XAMPP.

### ContentBucket

- Created a content and media sharing Web Application over a network. Idea was: Find all at one place.
- Users can upload/download contents like PDF Course books, Notes, ZIP project files needed for any course, or interests. Corner cases were taken special care.
- HTML, CSS, PHP, MySQL, XAMPP, Bootstrap.

### Flask Controller

- Developed automation scripts for a software, which were controlled by the Master server for a frontend application.
- Attention was given to redundancy, abstraction, and error reporting. Frontend application used APIs to communicate and give work.
- Python, MySQL, XAMPP, Flask, pywin-auto, pyautogui, JSON.

### Backend CUDA engine

- Developed and converted numpy intensive code to C++ and C.
- Designed and implemented parallel processing paradigm to the computation intensive parts of application to gain high speedups.
- C, C++, CUDA NVCC, Python, JSON parser.