# Akhilesh Kumar

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Indian Institute of Technology Guwahati

#### Education

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
B.Tech	Indian Institute of Technology Guwahati	7.21	2017 - Present
Senior secondary	CBSE board	85.4	2016
Secondary	CBSE board	9.6	2014

# **Projects**

portfolio:https://akhil309.github.io/

· Inventory Management System

Jun 2019-present

Django based website for inventory management of Electronics Club, IIT Guwahati. User registration and authentication, transferring item, returning item and saving transactions details have been implemented.

• Movie Recommender System

(remote project) May 2019-Jun 2019

International Business Machine Corporation, New York

Based on my Coursera course assignment, built a content based and collaborative filtering recommender system on data from IBM object storage.

· Drowsy Driver Detection

Apr 2019-May 2019

Face detection and prediction is implemented with opency to generate an alarm whenever driver feels drowsy.

 V-Motion Jan 2019-Mar 2019

Electronics Club

Performed depth image segmentation, convex hull, contours finding, music threading using Intel RealSense camera to produce music from movement of hands.

· Hand Gesture Controlled Mouse Cursor

Nov 2018-Dec 2018

Electronics Club

Worked on vision based gesture recognition and tracking with histogram model, back-projection and mouse interfacing using pyautogui.

#### Technical skills

• Computer languages: C, C++, Python, Java\*, MATLAB\*

• Web technologies: HTML, CSS, Django

• Database management : mySQL

• **Software and Tools**: Scikit-learn, pandas, Keras, opency.

• Artificial Intelligence : Machine Learning, Computer Vision

\* Elementary proficiency

## Key courses taken

- Introduction to computing(with practicals)
- Algorithmic Toolbox
- · Data Structure and Algorithms
- · Probability and Random Processes
- · Signal Systems and Network
- · Digital Signal Processing\*
- Digital Circuits and Microprocessors
- Linear Algebra \*ongoing course

# **Positions of Responsibility**

- Computer Vision and Machine Learning Head, Electronics Club IIT Guwahati. Apr '19-present
  - · Headed and managed a team of 22 people in completing their different projects successfully.
- City Representative, Technothlon 2018.
- PR and Branding Executive, Techniche 2018 (Annual Techno-management fest of IITG).

## **Achievements**

- Best project award and best demo project award for V-Motion in Techevince, 2019.
- Secured all india rank 4106 in JEE among 0.12 million students.

#### **Extracurriculars**

- Matlab workshop: Attended a 3-day workshop on Image and signal processing.
- Kriti: Participated in institute label hostel technical competition and secured 4th position.
- Manthan: secured 3rd position in institute label group dance competition.
- Maths tutor at Prism Eduventures and doubt solver at Mytutor247.