

## PERSONAL SUMMARY

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Computer Science and Sports Engineering graduate looking to secure a role in developing and using technology for biomechanics applications in the Sports Industry.

## EDUCATION

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### Sheffield Hallam University

Sheffield, UK

MSc. Sports Engineering , High Merit

2019–2020

- **Thesis:** “**Extending 2D pose estimation algorithms for lower leg kinematics**”, Clear Merit.  
Worked with New Balance and Centre for Sports Engineering Research to train 2D Pose Estimation Algorithms to study lower leg kinematics.
- **Relevant Modules:** Numerical Programming in sports Engineering (Distinction), Design and Innovation (Distinction), Applied Research (High Merit), Applied Measurements (High Merit).

### CHRIST University

Bangalore, India

B.Tech. Computer Science and Engineering, GPA: 3.50/4.00

2015–2019

- **Thesis:** “**Open Pose based running technique analysis**”, Distinction.  
Worked with Sports Authority of India in an attempt at using OpenPose based pose estimation to analyse block clearance of Sprinters.
- **Relevant Modules:** Data Science (High Merit), Project Management (High Merit), Parallel Computing (High Merit), Artificial Intelligence (High Merit), Computer Oriented Numerical Analysis (High Merit), Discrete Mathematics (High Merit)

## SKILLS

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- **Advanced:** Data Analysis (Python , MATLAB , Excel), Image Processing (Python, MATLAB), Statistical Analysis (SPSS), Report/Academic Writing (Latex , MS Word), Public speaking and Presentation, Analytical and Critical Thinking.
- **Intermediate:** Deep Learning for computer vision (Tensorflow, Numpy, SciKit , OpenCV), Computer Aided Design (SolidWorks), Web Development (Python Flask, HTML, CSS , Vanilla JS), Programming Languages (JAVA, C), Microprocessor programming (Arduino and Wiznet), Adobe Photoshop and InDesign.
- **Beginner:** Computational Fluid Dynamics (Ansys Fluent), Android App Development (Java).

## EXPERIENCE

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### Digital Coach

Sheffield , UK

Sheffield Hallam University

January 2020 –April 2020

- Helped conduct knowledge transfer and hands on sessions on basics of web development for first time developers. Conducted in person and virtual drop-in sessions.

### Team Lead -Automated Infrastructure Management System

Bangalore, India

CHRIST University

June 2017 - March 2018

- Led a team of peer engineers in envisioning a long term in-house built Enterprise Resource Planning software for the university.
- Conducted brainstorming sessions and requirements-gathering to come up with a consolidated software-requirements document and User Interface prototype.
- Presented and managed relationships with various stakeholders and end users.

- Marketed and conducted recruitment for upcoming students to enroll in the project build.

### **Full Stack Web Developer**

Xobin technologies Pvt. Ltd.

Bangalore, India

April 2018 – May 2018

- Worked on Python Flask framework along with MongoDB and Docker to create a note taking application. Conducted a live coding webinar of the project build.
- Designed and created a tutorial for basic python, flask framework and MongoDB Database.

### **Technical Intern**

Xobin technologies Pvt. Ltd.

Bangalore, India

April 2017 – May 2017

- Solved algorithm and data structure based competitive coding questions to equip an Artificial Intelligence based interviewing bot.
- Analysed interviews of technology-based organizations, to discover patterns in their technical interview questions.

## **RELEVANT PROJECTS**

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See full list of projects on [ashjostan.site/projects](https://ashjostan.site/projects)

- **Reliability of Kinect V2 based body scanner for kinanthropometry survey:**  
Developed a MATLAB script to extract calf and waist girth from 3D scans. Collected participant 3D body scans and reported reliability of measurement of calf and waist girth in comparison to an ISAK Practitioner.
- **Modelling the trajectory of a table tennis ball:**  
Built an interactive MATLAB app to study the effect of back spin and top spin on a Table tennis ball's 2D trajectory.
- **Design and Computational Fluid Dynamics analysis of a novel cycle helmet:**  
Worked in a team to develop a novel beginners cycle helmet in a Human Centered Design process from ideation to industry prototyping.
- **Concurrent Validity of using OptoJump to record step frequency:**  
Reported on the concurrent validity of using OptoJump in comparison to using step frequency recorded manually using high speed video camera footage.

## **CERTIFICATIONS AND AWARDS**

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- Certified Chief Innovation Officer, ROCHESTON - Mastery of cross-function value chain in an organisation.
- University Peer Educator - Certified peer educator for knowledge transfer sessions on soft skills.
- ISEA Conference, 3 Minute Thesis Competition - Presented my masters thesis and placed 2nd.
- Wiznet international contest winner - Finished first in "Curation is Creation" contest and won 3,000 USD.
- University Engineers day project presentation winner - Won twice for the projects "Gesture It" and "Sleep Detection".
- Indian National level government hackathon - Placed top 12 over 550+ in a 24 hour hackathon.
- National conference project presentation - Placed second in a national conference for project "Gesture It".
- Tata Consultancy Service "CodeVita", Competitive Coding - Cleared round 2 out of 3 rounds in two consecutive years 2017, 2018.

## **INTERESTS**

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As an active person from a very young age, I've enjoyed a variety of sporting activities. I've represented my undergraduate university as a handball player and actively participated in track and field events. Currently I enjoy recreational running and recently completed the 50 miles in a month charity event for the Children Society in August 2020.