

## AYAN AHMED

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Currently, leading the delivery of Tripal's new data driven footwear line and maintenance of their shoe sizing app. Seeking a role that will involve application of my technical and interpersonal skills to help my team deliver products that enhance the end user experience.

### EXPERIENCE

**Tripal Group** **Wellingborough, UK**  
*Digital Product Manager* **2020 - Present**

- Leveraged the shoe sizing app's ability to influence end user experience in a B2B industry to create a subscription based revenue stream for Tripal and secure new high value distributors that generate 15% of current revenue
- Leading the design, marketing and technical sales program for Tripal's new app data driven footwear line, expected to create over 20% in additional revenue over the next 3 years

**The University of Sheffield at Tripal Group** **Wellingborough, UK**  
*Knowledge Transfer Partnership (KTP) Associate – Mobile App Developer* **2017 - 2020**

Delivered an end-to-end system which captures and utilises user data to create personalised footwear by leveraging 3D printing.

#### Digital Foot Data Capture System

- Created a digital presence for Tripal, by developing a cross-platform mobile app to capture customer foot data as opposed to setting up physical 3D scanning stations across the UK, saving over £200,000 in equipment, training and logistical costs
- Utilised Python for the app's computer vision based image processor that extracts relevant foot dimensions and contours
- Introduced and implemented Google Cloud Platform (GCP) and Firebase for the apps backend requirements

#### Personalised Footwear (insole) Design

- Conducted studies to find correlations between perceived underfoot comfort and relevant biomechanical parameters
- Data from these studies have been coupled with those captured by the app to provide accurate footwear sizing recommendations and manufacture 3D printed insoles that generate personalised comfort and performance
- These insoles will account for over 70% of the footwear accessories revenue within the next 3 years

#### Student Project Supervision

- Acted as the key industrial mentor for individual and group student projects stemming from my KTP, across different academic departments at the University of Sheffield

**Sheffield Undergraduate Research Experiences (SURE) Scheme** **Sheffield, UK**  
*Summer Research, Intern* **2015**

- Discovered a critical point of inflection in the coefficient of friction (CoF) values at low pressures, when investigating the CoF between tennis shoes and different playing surface interfaces

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### EDUCATION

**The University of Sheffield** **Sheffield, UK**  
*MEng in Mechanical Engineering, First Class Honours: 74%* **2013 - 2017**

**Final Year Project:** Investigation of the impact and penetration resistance of current ballistic materials, when treated with nano-particle based shear thickening fluids (STFs) revealed that incorporation of STFs does not improve performance.

- Improved delivery of the 1<sup>st</sup> year Mechanics module through tutoring and acting as a liaison between staff and students as a peer assisted study session (PASS) leader; lead and trained the new cohort of PASS leaders as an advanced PASS leader
- Supported first year international students with adjustment to the new education system and culture as a Sheffield Mentor

**La Martiniere for Boys** **Kolkata, India**  
*Indian School Certificate (ISC) Examinations: 96.5%* **2001 - 2013**

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### SKILLS AND CERTIFICATIONS

- **Coding:** JavaScript, React Native, Expo, Python, OpenCV, Google Cloud Platform, Google Firebase
- **Engineering Tools:** ANSYS, Fusion360, SOLIDWORKS
- **Professional Certifications:** PRINCE2 Foundation, AgilePM Foundation, AgileBA Foundation, Six Sigma Yellow and Green Belt
- **Languages:** Fluent in English and Bengali, conversant in Hindi

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### ADDITIONAL INFORMATION

- **Volunteer, Splash for Kids, Kolkata, (2014, 2016):** Facilitated the learning of Science, Mathematics and English for a group of underprivileged children with learning disabilities
- **Faculty Undergraduate Scholarship, (2013 -2017):** Received this every year for outstanding academic achievement
- **Innovation in Science Pursuit for Inspired Research (INSPIRE) Award, (2013):** Received by virtue of finishing in the top 1% in the all India ISC Examinations (<http://www.inspireawards-dst.gov.in>)