

KAZI MIFTAHUL HOQUE

Email: kazimifta13@gmail.com Portfolio: kazi-mifta.github.io/Portfolio/

RESEARCH EXPERIENCE

Patent

- K. Hoque, D. Gladyshev, R. Shah, **Arch height difference measurement**, U.S. Provisional patent application, filed Apr. 2023.
- K. Hoque, D. Gladyshev, A. Tokar, R. Shah, J. Mulligan, and P. Silveira, **System and Methods for Determining a Quality Metric of Three-Dimensional Image Data**, U.S. Provisional patent application, filed Aug. 2023.

Undergraduate Research(Jan 2017 – Oct 2019)

Chittagong University of Engineering and Technology (CUET)

Thesis Title: “[OptiFit: Computer-Vision-Based Smartphone Application to Measure the Foot from Images and 3D Scans](#)”

Research Supervisor: Dr. Ashad Kabir

Presentation

P. Silveira, R. Shah, K. Hoque and E. Fletcher, “**3D Sensing for Medical Applications**,” invited for presentation at Computational Optical Sensing and Imaging, Boston, MA, Aug. 2023.

PROFESSIONAL EXPERIENCE

Structure, USA – 3D Software Engineer(Remote)

September 2022 – PRESENT

- Examined a very large foot scan dataset(1 M) and developed new algorithms to measure human foot dimensions.
- Developed techniques to measure quality of human foot scans by analyzing the foot mesh.
- Developed an [iOS application](#) that demonstrated 3D reconstruction using Apple’s TrueDepth sensor. It was demoed at the American Orthotics and Prosthetics Association meeting in Sep. 2022 (San Antonio, TX).

Ease Your Motion, Australia – Researcher & iOS Developer(Remote)

June 2021 – August 2022

- Collaborated with pedorthists and bionic engineers to develop new systems to provide a better 3D scanning experience for foot care experts.
- Worked with orthotic fabricators and developed features to streamline the fabrication process.

Academic Credentials

Chittagong University of Engineering & Technology, Chittagong – Bachelor of Science in Computer Science and Engineering

May 2016 – August 2022, CGPA – 2.74

Senior Thesis: Biometric image watermarking technique using Fractional Fourier Transform and Interpolative Decomposition.

Standardized Test Scores

International English Language Testing System(IELTS) - 10th June, 2023

Overall	Listening	Reading	Writing	Speaking
7.5	8.0	7.0	7.0	8.5