

# MD. AMIT HASAN AROVI

Senior Software Engineer, Nilavo Technologies Ltd., Bangladesh

**E-mail:** amit@iut-dhaka.edu

**Web:** <https://amithasanarovi.github.io>

## Professional Statement

---

I am a senior software engineer at Nilavo Technologies Ltd., Bangladesh. I earned a Bachelor of Science in Computer Science and Engineering from Islamic University of Technology in 2015. I am a self-motivated and detail-oriented individual with an extensive understanding of programming languages and tools. I am an avid problem solver with strong analytical and critical thinking skills. I enjoy working both independently and in groups. My responsibilities as a software engineer involve developing and testing web applications, as well as debugging and troubleshooting programs and conducting research and development on available technologies for incorporating new features and fixing issues. In my spare time, I enjoy researching and learning about various aspects of computer science that fascinate me.

## Education

---

2011 - 2015      **BSc Computer Science and Engineering**, Islamic University of Technology, Bangladesh  
*Specialization:* Human-Computer Interaction  
*Thesis Topic:* Speech Based Interaction for the Visually Impaired  
*Supervisor:* Dr. Md Kamrul Hasan

## Selected Courses (Undergraduate)

---

Computer Fundamentals and Programming; Computer Programming; Object-Oriented Programming; Visual Programming; Data Structures; Algorithms; DBMS; RDBMS Programming; Engineering Drawing; Geometry and Differential Calculus; Discrete Mathematics; Integral Calculus and Differential Equations; Linear Algebra; Statistical and Mathematical Analysis; Numerical Analysis; Probability & Stochastic Processes; Operating Systems; Microprocessors and Assembly Language; Systems Analysis and Design; Software Engineering & OOD; Graph Theory; Machine Learning; Unix Programming; Software Development; Artificial Intelligence & Expert Systems; Theory of Computing; Digital Image Processing; Human-Computer Interaction; Pattern Recognition.

## Programming / Technical Skills

---

C#, ASP.NET, VB.NET, SQL, React Native, Flutter, Python, Java, Android, C/C++, JavaScript, HTML/CSS, IDEs and Text editors, Command line tools

## Industrial Experience

---

### Senior Software Engineer

January 2022 – Present      Nilavo Technologies Ltd., Bangladesh

**Responsibilities:** Developing web applications in ASP.NET and C#, as well as debugging and troubleshooting programs; conducting research and development on available technologies for incorporating new features and resolving problems; and performing security audits on existing systems to identify security flaws and apply effective fixes to ensure optimal security.

### Software Engineer

January 2019 – December 2021      Nilavo Technologies Ltd., Bangladesh

## Junior Software Engineer

December 2015 – December 2018

Nilavo Technologies Ltd., Bangladesh

## Software Engineer Intern

November 2014 – December 2014

XeonBD, Bangladesh

**Responsibilities:** Developing Android applications.

## Selected Awards

---

2015                      Winner of Imagine Cup 2015 Bangladesh World Citizenship Competition and World  
Semi-finalists with project ***Eye Pointer*** (Eye Pointer)

## Publications

---

### Conference Papers (refereed)

Khan, N., Arovi, M. A. H., Mahmud, H., Hasan, M. K., & Rubaiyat, H. A. (2015, December). Speech based text correction tool for the visually impaired. In *2015, 18th International Conference on Computer and Information Technology (ICCIT)* (pp. 150-155), IEEE.

## Projects

---

**Anvil EQ™ (Anvil EQ)**– Anvil EQ™ is an on-demand equity administration application specifically designed for private companies, their legal advisors, accountants, and investors. The basic application facilitates the seamless management of stock and option schedules. Additional standard and custom modules may be added for more complex tasks, including stock option expensing (ASC Topic 718) for companies and mark-to-market valuations for funds. This project is being developed using **C#, ASP.NET, MSSQL**.

**Data Collector** – An iOS and Android-based application to collect the image, video, and sensor data for an ML-based crack and defect detection approach for road condition evaluation. Developed using **Dart and Flutter**.

(Data Collector)

**Eye Pointer** – A software for the handicapped with non-working hands to enable them to use computers. Developed using **C#, .NET Framework, Emgu CV, and Visual Studio**. (Eye Pointer)

**Pointer Security** – A mobile phone application for Android and Windows to ensure the security of computers. It allows users to stream a webcam and monitor the screen of the computer, locking or shutting down the computer. Developed using android/windows Phone 8.1.

**Speech-based interaction app for the visually impaired** – Using an Android phone as a remote, users can use text editors on computers, listen to music, read E-books, and search files. Developed as a part of the undergraduate thesis and implemented using **Android, Java Swing, and Google Speech**.

**Railway Ticket Management System** – Web application for processing Railway tickets. Developed using **C#, ASP.NET, MSSQL**.

**General Knowledge Enhancer** – An Android smartphone application that allows students to develop and enhance their general knowledge of science, math, and international affairs.