

Abheek Bose

Singapore | +65 82422296

abheek.bose@gmail.com | www.linkedin.com/in/abheekbose | www.abheek.me

ENGINEERING PROFILE

- Entrepreneurial professional with over 15 years of experience in design, technology & engineering.
- Deep expertise in hardware, software & digital systems, specializing in industry 4.0, robotics & automation.
- Experience in diverse industries including healthcare, manufacturing, supply chain, agriculture & energy.
- Founded and ran successful companies in software & robotics.

EDUCATION

October 2003 – August 2005 Sankt Augustin / Bonn, Germany	University of Applied Sciences (Hochschule) Bonn Rhein Sieg Fraunhofer Institute of Autonomous Intelligent Systems	MSc in Autonomous Systems (Computer Science) Project Intern Founder, RoboCup Team
September 1999 – July 2003 Bangalore, India	RV College of Engineering	BEng (Hons), Mechanical Engineering

PORTFOLIO



SEMI AUTOMATED VISION INSPECTION (SAVI)

Machine Learning, Digital Innovations, Complex Supply Chain, Medical Technologies

Orthopedic Loan Kit Supply Chain is highly complex. The instruments return to the warehouse for cleaning, inspection and sent out for new surgeries, within strict turnaround times. Each set contains over 100 instruments which needs thorough cleaning & inspection – all done manually.

SAVI automates this process creating a 30% increase in productivity and digitizing the workflows enabling end to end traceability of the instruments.

PROJECT LIGHTSPEED - ON DEMAND ROBOTIC LABELLING

Robotics & Automation, Digital Innovations, System Integration, IIoT

Medical Devices industry is highly regulated and needs custom labels for key APAC markets. The labeling process must be GxP compliant thus requires multiple checkpoints.

Project lightspeed automates this labeling process - both the physical handling of the products as well as the data automation at the back end including automated compliance checks.

This ensures a highly productive & compliant workflow with minimal human intervention resulting in 5x productivity benefits



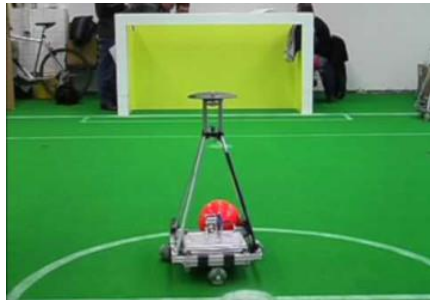


Lightweight Robotic Manipulators for Small & Medium Manufacturing Industries

Cost effective and easy to install, these robots were designed & built ground-up to suit the needs of small and medium industries in India who could not afford incumbent robotic solutions due to high total cost of ownership

Modular conversion Kit to automate standard microscopes for Remote Pathology

Started off as a proof of concept in collaboration with Sigtuple Technologies, this kit converted any standard microscope to an automated one using a combination of motors, controllers, and single board computers. The modular design enabled the kit to be suitable to any of the leading microscope brands like Olympus, Leica, Keyence, etc.



A soccer bot used in European Robocup tournaments

Interactive mobile robots

Using a combination of intelligent design & multi sensor fusion, these robots were used in variety of interactive applications.

An interactive robot using any Android mobile phone as its primary sensor array & computing system



Modular mobile robots for industry applications

The VolksBot robot platform was designed using the LEGO concept. Interchangeable modular blocks with specific functionalities. Adding these blocks in different ways would allow the platform to demonstrate different capabilities.

