

Empowering the Autism-Community

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At the Faculty of Computer Science and Information Technology (FCSIT), Universiti Malaya, staff and students are applying technology to address real-world challenges faced by the autism community. One final-year Information Systems project developed a prototype Bahasa Melayu Picture Exchange Communication System (PECS) application that enables non-verbal children to construct sentences using culturally familiar icons such as nasi lemak, sekolah, and mak, making communication more meaningful and relatable than conventional Western-based symbol sets. In parallel, research on lightweight AI-based emotion recognition

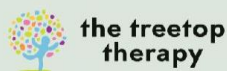
models tailored for unique facial expressions and communication of autistic individuals. Such models have the potential to support caregivers, therapists, and educators, providing more accurate, accessible tools for detecting emotional cues. These initiatives demonstrate how computing research can extend beyond technological advancement to create meaningful social impact. By combining AI, user-centred design, and close contact collaboration with the Autism community, FCSIT continues to develop practical and innovative solutions that foster inclusion, empower individuals with ASD, and improve their quality of life.

Quick Fact

- According to WHO, 1 in 100 children worldwide is on the autism spectrum.
- Over 300,000 Malaysians with ASD are served by fewer than 30 developmental pediatricians.
- AI social coaches like Noora could improve conversational confidence in 8 weeks.
- Speech-generating apps reduce meltdown frequency by up to 40%.

Get Involved

Join the FCSIT Inclusive Tech Hackathon in September 2026 to co-design solutions with autistic self-advocates.



School Inclusion for Autistic Children

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