

Intern Requirement

No. of students required	1
Preferred Discipline	<ul style="list-style-type: none">• Computer Engineering• Electrical Engineering• Computer Science
Prerequisites/ Skills Required	<ul style="list-style-type: none">• Knowledge in DSP• Matlab preferred• C/C++ Programming Skills preferred

Project Details

Title	R&D on DTMF Extraction Techniques
Overview/Background	<p><u>Background</u> Dual-tone multi-frequency signalling (DTMF) has been widely used in option selection in phone calls, e.g. language and other service options. Detection of the correct selected option is essential especially for call services e.g. phone banking.</p> <p><u>Overview</u> The intern will research on DTMF and produce a prototype to detect DTMF numbers in a speech file.</p>
Objectives/Scope/ Deliverables	<p>In the initial phase, the intern is required to conduct a thorough study on the various methodologies for DTMF extraction, understanding the supporting techniques, and also research on existing commercial products with DTMF features.</p> <p>This is followed by an implementation phase, during which the intern will develop a prototype application implementing DTMF extraction using the Goertzel Algorithm, so as to intelligently detect strings of DTMF digits in an audio streams.</p>
Project Duration	2-4 months