

2022 Intel Cup Undergraduate Electronic Design Contest – Embedded System Design Invitational Contest Project Introduction

University	National University of Singapore		
Faculty Mentor	Rajesh C Panicker		
Team Member	Kwek Zhan Hao	Manzel Joseph Seet	Ni Yilun
Subject	PLANET - Personalized, Localized Artificial Neural Network		
<p style="text-align: center;">Brief Introduction (Within 250 words)</p>	<p>In this work, we proposed a Personalized and Localized ANN which can be used by users for the purpose of speech recognition. The main purpose of the framework is for the layman to seamlessly record and train their own personal model based on the speech patterns in their own voice for them which would be deployed locally. This allows people of different languages and different accents, or even people with speech impediments to have access to a model that meets their individual requirements.</p> <p>Aiming for everyday use, there will be a minimalistic UI to guide the user through the step-by-step procedure of creating a personal model. Actions can be linked such as to allow them to configure what the output of the neural network would do, such as linking it to IoT applications, game outputs, home action like turning on the lights, receiving news and weather updates, or accessibility aid like wheelchair navigation.</p>		

1. Please fill the blanks with Times New Roman font, size 12, and single-spaced.
2. There should be only one faculty mentor.
3. Faculty mentor and team members should be the same as that on the registration form.
4. Subject should be the same as that on the final report.