

## Appendix 1: Programme schedule

Machine Learning, Robotics and Sensor Networks Summer School 23rd July to 17th August 2018					as of 27/11/17		
Module 1: Signal and Image Processing and Machine Learning							
WEEK 1	Monday 23 July	Tuesday 24 July	Wednesday 25 July	Thursday 26 July	Friday 27 July	Saturday 28 July	Sunday 29 July
Morning	<ul style="list-style-type: none"><li>• Welcome / Programme Overview</li></ul>	<ul style="list-style-type: none"><li>• Wireless communication for sensor networks</li></ul>	<ul style="list-style-type: none"><li>• Digital signal processing (1)</li></ul>	<ul style="list-style-type: none"><li>•Introduction to Machine Learning and Artificial Intelligence(1)</li></ul>	Group 1-3: (SALC 5)	Free day	Free day
09:30 to 12:30	<ul style="list-style-type: none"><li>• Introduction – Machine Learning, AI and Robotics</li><li>• Introduction: Body Sensor Networks and Internet of Things</li></ul> <ul style="list-style-type: none"><li>• Tutorial 1</li></ul>	<ul style="list-style-type: none"><li>• Network security and privacy</li></ul> <ul style="list-style-type: none"><li>• Tutorial 2</li></ul>	<ul style="list-style-type: none"><li>• Digital signal processing (2)</li></ul> <ul style="list-style-type: none"><li>• Tutorial 3</li></ul>	<ul style="list-style-type: none"><li>•Introduction to Machine Learning and Artificial Intelligence(2)</li><li>• Tutorial 4</li></ul>	Team Building and Leadership		
Noon	Lunch	Lunch	Lunch	Lunch	Lunch		
Afternoon	Campus Tour (12:30-13:30)	Groups Allocation and Project briefing	Laboratory Tour	<ul style="list-style-type: none"><li>• Introduction to Group Projects</li></ul> <ul style="list-style-type: none"><li>• Tutorial 5</li></ul>	Group 4-6: (SALC 5)		
13:30 to 16:30					Team Building and Leadership		
WEEK 2	Monday 30 July	Tuesday 31 July	Wednesday 1 August	Thursday 2 August	Friday 3 August	Saturday 4 August	Sunday 5 August
Morning	<ul style="list-style-type: none"><li>• Artificial Neural Networks (1)</li></ul>	<ul style="list-style-type: none"><li>• Probablistic Reasoning (1)</li></ul>	<ul style="list-style-type: none"><li>• Probablistic Reasoning (3)</li></ul>	<ul style="list-style-type: none"><li>• Internet of Things and Body Sensor Networks (1)</li></ul>	<ul style="list-style-type: none"><li>• Image Processing (1)</li></ul>	Free day	
09:30 to 12:30	<ul style="list-style-type: none"><li>• Artificial Neural Networks (2)</li></ul> <ul style="list-style-type: none"><li>• Tutorial 6</li></ul>	<ul style="list-style-type: none"><li>• Probablistic Reasoning (2)</li></ul> <ul style="list-style-type: none"><li>• Tutorial 7</li></ul>	<ul style="list-style-type: none"><li>• Probablistic Reasoning (4)</li></ul> <ul style="list-style-type: none"><li>• Tutorial 8</li></ul>	<ul style="list-style-type: none"><li>• Internet of Things and Body Sensor Networks (2)</li></ul> <ul style="list-style-type: none"><li>• Tutorial 9</li></ul>	<ul style="list-style-type: none"><li>• Image Processing (2)</li></ul> <ul style="list-style-type: none"><li>• Tutorial 10</li></ul>		
Noon	Lunch	Lunch	Lunch	Lunch	Lunch		
Afternoon	Self Study	Effective Communication for Presentation Workshop (Dr. Caroline Hargreaves)	Activity with student ambassadors	Self Study	Self Study		
13:30 to 16:30							

Module 2: Computer Vision and Robotic Vision							
WEEK 3	Monday 6 August	Tuesday 7 August	Wednesday 8 August	Thursday 9 August	Friday 10 August	Saturday 11 August	Sunday 12 August
Morning 09:30 to 12:30	<ul style="list-style-type: none"><li>• Image Segmentation (1)</li><li>• Image Segmentation (2)</li><li>• Tutorial 1</li></ul>	<ul style="list-style-type: none"><li>• Shape and Texture (1)</li><li>• Shape and Texture (2)</li><li>• Tutorial 2</li></ul>	<ul style="list-style-type: none"><li>• Image sequencing (1)</li><li>• Image sequencing (2)</li><li>• Tutorial 3</li></ul>	<ul style="list-style-type: none"><li>• Stereo Vision (1)</li><li>• Stereo Vision (2)</li><li>• Tutorial 4</li></ul>	<ul style="list-style-type: none"><li>• Motion and Structure (1)</li><li>• Motion and Structure (2)</li><li>• Tutorial 5</li></ul>	Free day	Free day
Noon	Lunch	Lunch	Lunch	Lunch	Lunch		
Afternoon  13:30 to 16:30	Self Study	Self Study	Activity with student ambassadors	Self Study	Self Study		
WEEK 4	Monday 13 August	Tuesday 14 August	Wednesday 15 August	Thursday 16 August	Friday 17 August	Saturday 18 August	Sunday 19 August
Morning 09:30 to 12:30	<ul style="list-style-type: none"><li>• Robotic Vision - State of the Art (1)</li><li>• Robotic Vision - State of the Art (2)</li><li>• Tutorial 6</li></ul>	<ul style="list-style-type: none"><li>• Robotic Vision - Applications in Healthcare (1)</li><li>• Robotic Vision - Applications in Healthcare (2)</li><li>• Tutorial 7</li></ul>	<ul style="list-style-type: none"><li>• Brain Computer Interface</li><li>• BCI Demo</li><li>• Tutorial 8</li></ul>	<ul style="list-style-type: none"><li>• Trial Run - Demos</li></ul>	<b>Group Presentations</b>  8 groups 15 mins each  <b>Closing Ceremony</b> <b>Followed by farewell reception with student ambassadors (ends 13:00)</b>	Free day	Free day
Noon	Lunch	Lunch	Lunch	Lunch	Lunch		
Afternoon  13:30 to 16:30	Self Study	Self Study	<ul style="list-style-type: none"><li>• Group Project Mentoring (13:30 to 16:00)</li></ul>	<b>Presentation rehearsal support (from 13:30 to 17:00)</b>	students depart		