Turing Summer Program 2024

	July 8	July 9	July 10	July 11	July 12
	Day 1 (Lilly/Abel)	**Day 2 (Abel)**	**Day 3 (Mehmet)**	**Day 4 (Walid)**	**Day 5 (Nathan)**
9:30 AM - 11:00 AM	**Student check-in** Program Intro, Prashant/Lilly/Abel	**Lecture:** Body Area Networks for Mobile Health Jeremy Gummeson	**Lecture:** Intro to Robotics Hao Zhang (Oscar)	**Lecture:** Earable Systems for Healthcare VP Nguyen (Amir and Aziz)	**Lecture/lab**: Enabling Health with Wearables Ivan
11:00 AM - 12:00 PM	**Icebreaker:** Spaghetti Tower Riley, Anh, Jason, Angelica	**Lab**: Sensor Data Exploration with Low Power Sensors Jeremy Gummeson	**Lab Tour:** Human-Centered Robotics (HCR) Hao Zhang (Oscar)	**Lab**: Health Care Sensing VP Nguyen (Amir and Aziz)	**(*)Scripted Lab**: Step Count (cont) Heart Rate Lilly/Swetha/Riley/Anh
12:00 PM - 1:30 PM	Lunch	Lunch	Lunch	Lunch	Lunch
1:30 PM - 2:30 PM	**Lecture:** Introduction to CS, Prashant	**(*)Lab**: Getting Started with Python - Variables, Abel/Ajith/Jason/Angelica	**(*)Lab**: If-else condition, Mehmet/Ajith/Jason/Angelica	**(*)Lab**: Loop, Walid/Ajith/Jason/Angelica	**(*)Lab**: Loop (cont) Nathan/Ajith/Jason/Angelica
2:30 PM - 3:30 PM	**(*)Lab**: Introduction to Computer Programming, Abel/Ajith/Jason/Angelica	**(*)Lab**: Getting Started with Python - I/O Abel/Ajith/Jason/Angelica	**(*)Lab**: If-else condition (con't), Mehmet/Ajith/Jason/Angelica	**(*)Scripted Lab**: Step Count Lilly/Ajith/Jason/Angelica	**(*)Lab**: Week 1 Recap Nathan/Lilly/Ajith/Jason/Angelica
3:30PM - 4:00 PM					

	July 15	July 16	July 17	July 18	July 19
	Day 1 (Dan Holcomb)	**Day 2 (Wayne Burleson)**	**Day 3 (Marc Liberatore)**	**Day 4 (Amir)**	**Day 5 (Brian Levine)**
9:30 AM - 11:00 AM	**Lecture/Lab**: Introduction to computer hardware (boolean logic, integrated circuits, fabrication)	**Lab:** Introduction to Cryptography	**Lecture**: Introduction to Blockchain	**Lecture/Lab**: Anonymous communications	**Lab**: Intro programming related to the scripted lab
11:00 AM - 12:00 PM	**Lecture/Lab**: Introduction to hardware fingerprinting for privacy and authentication	**Scripted Lab**: Block Ciphers	**Scripted Lab**: Hash function	**Lecture:** Security and AI	**Lecture**: Introduction to digital forensics (including breaks)
12:00 PM - 1:30 PM	Lunch	Lunch	Lunch	Lunch	Lunch
1:30 PM - 2:30 PM	**Lecture**: Introduction to reverse engineering	**Lecture:** Embedded Security	**Lecture/Lab**: Public Key Cryptography	Program Tour: Server Room AbelMehmet//Lilly	**Scripted Lab**: Digital Forensics
2:30 PM - 3:30 PM	The Imitation Game Anh/Riley	**Program Tour:** ECE Labs		Program Tour: Campus Walk Jorge/Lilly/Mehmet/Riley/Anh	
		Lecture: Women in Cryptography			
3:30PM - 4:00 PM		**Lecture:** Future Topics in Cryptography	Project Idea/Scope Discussion (Lilly/Abel/Mehmet/Nathan/Jorge)		**Program Tour**: Makerspace 3D and Laserprinting Abel/Nikko/Lilly

	July 22	July 23	July 24	July 25	July 26
	Day 1 (Abel)	**Day 2 (Jorge)**	**Day 3 (Lilly)**	**Day 4 (Lilly/Abel)**	**Day 5 (Lilly/Abel)**
9:30 AM - 11:00 AM	**Lecture**: Unique Sources of Energy Friction, Temperature Difference Noman	**Lecture**: Optimizing Power and Performance of Edge AI Prashanthi	**Lecture**: Energy and Sustainability 4 Nikko	**Computers for Creativity:** Student Team Project Lilly/Abel/Nathan/Mehmet/Jorge	**Computers for Creativity:** Project Demo Lilly/Abel/Nathan/Mehmet/Jorge/
11:00 AM - 12:00 PM	**Lecture**: Energy and Sustainability 1 David	**Lecture**: Energy and Sustainability 2 Mohammad	**Lecture:** Energy and Sustainability 5 Cooper		
12:00 PM - 1:30 PM	Lunch	Lunch	Lunch	Lunch	Lunch
1:30 PM - 2:30 PM	**Lecture**: Self-driving Car Abel/Riley	**Lecture**: Energy and Sustainability 3 Abel	**(*)Lab**: Functions Lilly/Ajith/Anh/Angelica	**Computers for Creativity:** Student Team Project Lilly/Abel/Nathan/Mehmet/Jorge	**Student Hangout:** Fun and Games Jorge/Mehmet/TAs
2:30 PM - 3:30 PM	**Show and Tell**: Self-driving Car Abel/Riley	**(*)Lab**: Lists/Arrays/Sets and Functions? Jorge/Ajith/Anh/Angelica	**Show and Tell**: Mixed AR/VR Yasra	**Panel session:** Life as a CS Undergraduate at UMASS Riley/Anh	**Program Debrief** Prashant/All
3:30PM - 4:00 PM					