

Project Skills Matrix

ECE4871

rev.

1/18/2018

Directions: Please rate yourself in each of the skillsets according to the scale:

0=No relevant experience, 1=exposed to but limited proficiency, 2=applicable coursework and/or work experience, 3=2+ years academic or professional experience

Team Member	Analog Design	Digital Design	Real-Time Software Coding	Mechanical Design	PCB, Mechanical Design, Assembly	Project Management	Team Leadership	Technical Writing	Avg	StDev
Radha Changela	1.0	2.0	0.0	2.0	1.0	2.0	2.0	2.0	1.5	0.8
Katie Roberts	2.0	3.0	1.0	0.0	2.0	3.0	2.0	2.0	1.9	1.0
Hubert Elly	2.0	1.0	2.0	0.0	1.0	1.0	2.0	2.0	1.4	0.7
Christine Saw	2.0	1.0	1.0	0.0	1.0	1.0	2.0	2.0	1.3	0.7
Lara Kassabian	1.0	1.0	0.0	3.0	2.0	3.0	3.0	0.0	1.6	1.3
Katie Weatherwax	1.0	2.0	0.0	1.0	2.0	3.0	3.0	3.0	1.9	1.1
Elizabeth Herrejon	1.0	1.0	2.0	3.0	2.0	3.0	3.0	3.0	2.3	0.9
Member X (Advisor)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg:	1.3	1.4	0.8	1.1	1.4	2.0	2.1	1.8		
StDev:	0.7	0.9	0.9	1.4	0.7	1.2	1.0	1.2		

Expanded Descriptions:

Analog Design	Transistor level design (IC or PCB) of amplifiers, filters, power supplies, ADC/DACs, RF circuits (Antenna/GPS), PSPICE, Cadence, ADS (or eq.)
Digital Design	Multisim
Real-Time Software Coding	Real-time C++ (or eq.), assembly language, uC/uP programming, critical timing algorithms, data interfaces (USB, Bluetooth, ethernet, etc.), DSP (particularly audio processing)
Mechanical Design	CAD (Solidworks, AutoCAD), mounting/housing electrical components
PCB or Mechanical Design	PCB layout tools (Eagle, Virtuoso, PADS, etc.), mechanical design tools (AutoCAD, Solidworks, Graphite, etc.), thermal modeling and analysis, machining and sheet metal fabrication, woodworking, soldering (iron and SMD oven), rework stations, PCB fab
Project Management Team	Scheduling, budgets, purchasing, organizing internal and external meetings, decision trees, document and software rev control
Leadership Technical	Team building, organization behavior, hiring/firing, interpersonal skills, knowing when to lead and when to follow
Writing	Project and research proposals, technical presentations, ability to communicate thoughts with a large audience

Guitar Tablature Project Skills Matrix

ECE4011 rev.1 2/9/2016

Skill Levels Normalized to $\mu=0$ $\sigma=1$ for each member with avg team skill added

Team Member	Analog Design	Digital Design	Real-Time Software Coding	Mechanical Design	PCB, Mechanical Design, Assembly	Project Management	Team Leadership	Technical Writing
Radha Changela	0.6	2.0	-1.2	1.8	0.7	2.7	2.8	2.4
Katie Roberts	1.9	3.4	0.1	-0.9	2.0	4.0	2.8	2.4
Hubert Elly	1.9	0.7	1.4	-0.9	0.7	1.3	2.8	2.4
Christine Saw	1.9	0.7	0.1	-0.9	0.7	1.3	2.8	2.4
Lara Kassabian	0.6	0.7	-1.2	3.1	2.0	4.0	4.1	-0.2
Katie Weatherwax	0.6	2.0	-1.2	0.5	2.0	4.0	4.1	3.7
Elizabeth Herrejon	0.6	0.7	1.4	3.1	2.0	4.0	4.1	3.7
Average Skill Level	1.2	1.5	-0.1	0.8	1.5	3.0	3.4	2.4
Specialist Rating	0.7	1.0	1.2	1.8	0.7	1.3	0.7	1.3
Analysis of Team Skills	Average	Average with Specialists	Weak with Specialist	Average with Specialists	Average	Strong with Several Specialists	Strong with Several Specialists	Strong with Several Specialists

Avg(StDev)= 1.09

Suggestions for Team Assignments	
Analog Design	Katie R, Hubert, Christine
Digital Design	Katie R, Radha, Katie W.
Real-Time Software Coding	Christine, Hubert, Elizabeth
Mechanical Design	Radha, Lara, Elizabeth
PCB or Mechanical Design	Katie R. Katie W, Lara
Project Management	Katie R. Katie W
Team Leadership	Elizabeth, Lara
Technical Writing	Katie W. Elizabeth, Christine, Radha
0	
0	
0	
0	

*Make sure piece sounds like one voice