

Appendix 3: List of Participants and Interviews

Online supplement for "The Making of an Expert Engineer" by James Trevelyan
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The table shows a list of interviews, field studies, and focus groups that provided analysis data. Where students helped with data collection, their initials are shown. Interviews followed the protocol, with some variations to suit circumstances and the topic under investigation. In addition to these interviews, there were many casual conversations from which field notes were recorded, and conversations with engineers to discuss the results of the analysis. About 220 more interviews were conducted and analysed by research students and are not included in this list. The analysis of these interviews has influenced the book as the author was supervising these research students and helped the students develop their ideas, and provided detailed constructive feedback on thesis chapters. Where this material has been used in the book, footnotes attribute the source to the respective students.

Country	Interviewer	Original discipline	Sex	Experience	Elsewhere	Role	Employer	format
Au	**	Civil	M	30	2 yr Saudi, 1 yr Pakistan	business information systems management	civil/mechanical plant design and construction management company	interview
Au	**	Mechanical	F	2	0.1 yr Pakistan	work packages offshore installation and commissioning	civil/mechanical plant design and construction management company	interview
Au	**	Mechanical	F	9	0.1 yr Pakistan	proposal development, client liaison, proposal and tender management	civil/mechanical plant design and construction management company	interview
Au	**	Civil/Structural design	M	4	1 yr Mongolia, 0.5 yr NZ	design, technical	civil/mechanical plant design and construction management company	interview
Au	**	Electrical	M	34	3 yr South Africa, 2 yr Brazil	Technical leadership and troubleshooting in process control software development	self-employed consultant on secondment to multinational process control, aerospace and instrumentation company	interview
Au	**	Mechatronics	M	1.5	Australian navy in SE Asia	Small project installation and maintenance in mainly building services sector	multinational process control and automation company	interview
Au	**	Electrical	F	15	none	Team leadership in process control software development	multinational process control, aerospace and instrumentation company	interview
Au	**	Civil	M	35	3 yr UK	CEO construction company	self-employed consultant at time, formerly CEO construction company	interview
Au	**	Mechanical	M	~10	unknown	Asset management coordinator and troubleshooter	large multinational mining and resource company	interview

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Au	**	Mechatronics	M	2	none	Traffic control systems hardware and software	large multinational electrical engineering company	interview
Au	**	Electrical	M	~15	3 yr Tanzania	Project management, business development	small technology development company	interview
Au	**	Mechanical (Dipl)	M	~30		Contracts management	large oil and gas company	interview
Au	**	Electrical	M	>20	5 yr in UK, 1 yr S. America	Process control project engineer	large engineering, procurement, construction company	interview
Au	**	Process control	M	2.5	Australian navy in SE Asia	Small project installation and maintenance in mainly building services sector	multinational process control and automation company	interview
Au	**	Mechanical, electronics	M	n/a	various	2 mechanical engineers, operations manager, electronics technician	medium size government-owned technical facility	focus group
Au	**	Electronics Technician	M	30	none	electronic instrument repairs	medium size government-owned technical facility	interview
Au	**	Electrical	M	17	0.2 yr Hong Kong	maintenance management planning	medium size government-owned technical facility	interview
Au	**	Electrical	M	20	none	site services maintenance manager	medium size government-owned technical facility	interview
Au	**	Mechanical	M	25	none	project engineering	medium size government-owned technical facility	interview
Au	**	Electrical	M	27	10 yr South America	electronics instrument maintenance	medium size government-owned technical facility	interview
Au	**	Mechanical, Electrical	M	24	none	technical supervisors	medium size government-owned technical facility	focus gp
Au	**	Mechanical	M	33	none	operations engineer	medium size government-owned technical facility	interview
Au	**	Mechanical	M	13	none	mechanical lead engineer	medium size government-owned technical facility	interview
Au	**	Electrical	M	13	4 yr South America	maintenance management planning	medium size government-owned technical facility	interview
Au	**	Mechanical	M	22	none	mechanical project engineer, operations manager	medium size government-owned technical facility	field study
Au	**	Mechatronics (rpt A007)	M	4.5	4 yr Australian navy in SE Asia	Small project installation and maintenance in mainly building services sector	multinational process control and automation company	interview

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Au	**	Mechanical	M	33	none	shift operations planning	medium size government-owned technical facility	interview
Au	**	Mechanical	M	20	none	group manager	medium size government-owned technical facility	interview
Au	**	Mechanical	M	3	none	design review and standards	government owned utility	interview
Au	**	Electrical	F	12	none	instrumentation and control	medium size government-owned technical facility	interview
Au	**	Electrical (I&C)	M	>20	UK, USA ~20 yr	engineering manager	large petroleum MNC	interview
Au	**	Chemical	M	>15	USA, Africa 8 yr	technical manager	large petroleum MNC	interview
Au	**	Mechanical	M	>20	UK >20 yr	lead operations engineer	large petroleum MNC	interview
Au	**	Physics	M	15	USA 15 yr	technology centre liaison	large petroleum MNC	ph interview
Au	**	Electrical	M	>20	USA, Africa >20 yr	field support engineer	large petroleum MNC	ph interview
Au	**	Mechanical/Marine	M	>10	UK 10 yr	technology qualification	large petroleum MNC	interview
Au	**	Mechanical/reliability	M	>10	USA 5 yr	reliability specialist	specialist technical consultancy	interview
Au	**	Mining/Petroleum	M	>20	UK, USA ~20 yr	lead technical expert engineer	large petroleum MNC	interview
Au	**	Physics/Eng Science	M	>20	UK 20 yr	lead technical expert engineer	large petroleum MNC	interview
Au	**	Chemical	M	6	PNG 1 yr	quality assurance manager	UK based EPCM	interview
Au	**	Chemical	M	4	None	reliability modelling engineer	specialist technical consultancy	interview
Au	**	Gas engineering	M	>20	UK 20 yr	lead technical expert engineer	UK based EPCM	interview
Au	**	Mechanical/petroleum	M	>20	UK 20 yr	project feasibility engineer	large petroleum MNC	interview
Au	**	Mechanical	M	>20	Scotland 3 yr	project manager	large petroleum MNC	interview
Au	AH	Civil	M	>20	UK 10 yr	divisional general manager	Medium sized construction company	interview
Au	AH	Mechanical	M	9	negligible	operations manager	Medium sized construction company	interview
Au	AH	Civil?	M	18	none	divisional general manager	Medium sized construction company	interview
Au	AH	Mechanical	M	accountancy	UK 4 years, Tanzania 1 yr	chief financial officer	Medium sized construction company	interview
Au	AH	Mechanical	M	>20		group general manager	Medium sized construction company	interview
Au	AH	Aeronautical	M	30	UK 18 yr	process design and improvement	Medium sized construction company	interview
Au	AH	Mechanical	M	18	Malaysia 16 yr	construction planning	Medium sized construction company	interview

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Au	AH	Mechanical	F	17	UK 15 yr	pipng construction project engineer	Medium sized construction company	interview
Au	MP	Mechanical	M	7	6 yr South America	mechanical project engineer	medium size mechanical component manufacturer	interview / field study
Au	MP	Mechanical	M	~30	14 yr UK	mechanical project engineer	medium size mechanical component manufacturer	interview / field study
Au	MP	Mechanical	M	3	none	mechanical project engineer	medium size mechanical component manufacturer	interview / field study
Au	MP	Civil	M	>20	none	mechanical project engineer	medium size mechanical component manufacturer	interview / field study
Au	MP	Mechanical	M	~30	none	design office manager	medium size mechanical component manufacturer	interview / field study
Au	**/DM	Mechanical	M	>20	none	engineering company manager	medium size engineering design construct management company	interview
Au	**/DM	Mechanical	M	10	none	mechanical design engineer	medium size engineering design construct management company	interview
Au	**/DM	Mechanical	M	8	none	mechanical design engineer	medium size engineering design construct management company	interview
Au	DM	Mechanical	M	4	none	mechanical design engineer	medium size engineering design construct management company	interview / field study
Au	DM	Mechanical	M	6	none	mechanical design engineer	medium size engineering design construct management company	interview / field study
Au	**	Civil	M	>15	8 yr military	CEO local office	UK-based consultant firm	interview
Pk	**	Mechanical	M	10	frequent international assignments	German based gas turbine maintenance engineer	Multi-national electrical engineering company	interview
In	**/VD	Mechanical	M	15-33	none	Maintenance engineering	public utility	focus group
In	**/VD	Mechanical	M	>25	none	Tool maker, CEO of business	small business factory owner	interview
In	**/VD	Mechanical	M	>30	none	Machine tool designer, CEO of business	medium business and factory owner	interview
In	**/VD	Mechanical	M	>15	none	Production engineer (mechanical), Plant manager	medium to large auto component manufacturer	interview
In	**/VD	Mechanical	M	4	none	Production assistant manager	large component manufacturer	interview
In	**/VD	Mechanical	M	12	none	Production line manager	large component manufacturer	interview
Pk	**	Production (Mech)	M	18	none	Hotel maintenance, engineering services	5 star hotel (retired)	interview

Country	Interviewer	Original discipline	Sex	Experience	Elsewhere	Role	Employer	format
Pk	**	Chemical	M	8	none	Process project design, maintenance	small specialist consultancy and supplier	interview
Pk	**	Telecommunication	M	8	0.1 training Europe	Mobile telecom maintenance supervision	multi-national electronics company	interview
Pk	**	Mechanical	M	4	none	Gas and electric maintenance for houses	government agency	interview
Pk	**	Civil	M	30	3 yr UK	Consultant	civil consultants (retired)	interview
Pk	**	Mechanical	M	20	none	CEO of business	small manufacturer of components for domestic appliances	interview
Pk	**	Mechanical	M	6	2 yr MBA Cornell	Executive Director of business	manufacturer of gas pipes for pipeline projects	interview
Pk	**	Mechanical	M	20	none	Sales manager, welding technical specialist	distributor of welding supplies and equipment manufactured in USA	interview
Pk	**	Mechanical	M	16	none	Inspection of process plant to plan maintenance	process plant owned by national company	interview
Pk	**	Mechanical	M	48	9 yr Saudi Arabia, 2 yr UK	Oil and gas pipeline construction, business development and contract negotiation	civil/mechanical plant design and construction management company	interview
Pk	**	Mechanical	M	50	1.2 yr German training	Technical advisor to CEO who succeeded him	manufacturer of gas pipes for pipeline projects	interview
Pk	**	Electronics	M	20	3 months Germany	Chief executive of business within multinational firm	european multinational mainly electrical engineering company	interview
Pk	**	Mechanical	M	45	4 yr Iran	Manager for quality control	manufacturer of tractors, including some component manufacture, assembly, marketing and field support	interview
Pk	**	Mechanical	M	40	8 yr UK including PhD	Manager for new product development	manufacturer of tractors, including some component manufacture, assembly, marketing and field support	interview
Pk	**	Chemical	M	25	1 yr Italy	Manager, technical services	fertiliser manufacturer, semi-government with dominant market share	interview
Pk	**	Mechanical	M	30	seminars only	Plant general manager	cement manufacturer, semi-government	interview
Pk	**	Mechanical	M	10	none	Maintenance planner	cement manufacturer, semi-government	interview
Pk	**	Civil	M	3	vacation employment	Construction site supervision	Nonprofit charitable healthcare trust	interview

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Pk	**	Civil	M	50	none	Chairman, nearly retired, civil works consulting engineer	Self-owned consulting engineering firm	interview
Au	**/ET	Civil	M	18	1 yr masters Norway	Feasibility studies of hydro electric power plants	electric power utility (govt)	interview
Au	TM	Mechanical	M	>20	South Africa >15 yr	design draftsman	mechanical plant design consultancy	interview
Au	TM	Mechanical	M		South Africa >15 yr	design draftsman	mechanical plant design consultancy	field study
Au	TM	Mechanical	M		South Africa >15 yr	design draftsman	mechanical plant design consultancy	field study
Au	TM	Mechanical	M	12	South Africa >10 yr	design draftsman	mechanical plant design consultancy	interview
Au	TM	Mechanical	M		South Africa >10 yr	design draftsman	mechanical plant design consultancy	field study
Au	TM	Mechanical	M		South Africa >10 yr	design draftsman	mechanical plant design consultancy	field study
Au	**	Mechanical	M	1	none	conditioning monitoring engineer	specialist technical consultancy	interview
Au	**	Mechanical	M	1	none	conditioning monitoring engineer	specialist technical consultancy	interview
Au	**	Mechanical	M	1	none	conditioning monitoring engineer	specialist technical consultancy	interview
Au	**	Mechanical	F	1	none	conditioning monitoring engineer	specialist technical consultancy	interview
Au	**	Mechanical	M	1	none	conditioning monitoring engineer	specialist technical consultancy	interview
Au	**	Mechanical	M	30	unknown	Senior design engineer	large engineering MN consultancy	interview
Au	SS	Mechanical	M	1	none	Junior Engineer	Oil and Gas	interview
Au	SS	Surveying	M	10+	none	Drilling Engineer	Oilfield Services Provider	interview
Au	SS	Mechanical	M	2	none	Junior Engineer	Mechanical Building Services	interview
Au	SS	Mechanical	M	20+	none	Senior Engineer	Mechanical Building Services	interview
Au	SS	Mechanical	M	20+	none	Project Manager/Director	Engineering, Procurement and Construction S	interview