

# Afsaneh Cooper

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## Career Summary

Highly motivated, enthusiastic, organized and advanced computer literate Mechanical Design Engineer with 16 years diverse experience. Demonstrates strong interpersonal skills, when working in a team. Unique ability to manage multi-disciplinary engineering research projects with minimum funding. Trains engineers at workplace in latest CAD Packages. Very popular engineering tutor among her 80 students.

### With Experience in the following areas:

- \* Gearbox
- \* Wind Turbine
- \* Floating Station
- \* Training & Assessment
- \* Turbomachinery's
- \* Solar Air heater
- \* Space Vehicle & Aerodynamics
- \* CFD
- \* TESOL
- \* FEA
- \* Project Management Practice
- \* CAD Solid Modelling
- \* Flywheel Energy Storage System
- \* Software Development

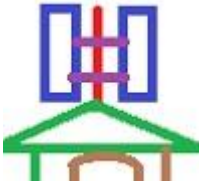
## Highlights of Qualifications

### Entrepreneur in Developing 2 CAD Software's for Standard Gear Boxes & Space Vehicle

- She turned all calculations in the German book written by Nieman about Gear Box Design and calculation into algorithm and turned all graphs, curves and tables into Subroutines. She worked hard 12 hours/day and 6 days a week to write many subroutines using FORTRAN language and after 1.5 years she produced a 1500 lines computer program for calculation and Design of Gearboxes, which only took 5 minutes to do all those lines of calculations!
- She repeated the same skills in turning all calculations to CAD and became **Entrepreneur in Research, Design & Promotion of Flywheel Energy storage system**
- After becoming an entrepreneur by starting from scratch doing research in a field no one was interested to do due to lack of engineering supervisor as well as funding and lack of technology in Australia, Murdoch University Professor Jennings, who was the head of Physics department, awarded her the status of PhD student in the field of Design and Manufacturing of a Flywheel Energy Storage System for the Wind Turbine for the first time in Australia.
- She accomplished the Design of that Flywheel for the first time in Australia. Until 2017 no academic has been found to supervise her by Murdoch University or by herself from other Australian universities to be qualified enough to work as her second supervisor! Five Co-Supervisors have showed interest to supervise her in 2017. Developed detailed project proposals and presented recommendations to senior partners.

### Entrepreneur in Research, Design & Development of Water Turbine / Exploitation of Water Power /Solar Air-conditioned

- After becoming an entrepreneur by starting from scratch and translating The text book of Turbomachinery by Dixon from English to Persian, and writing a proposal for design and manufacturing of the first Iranian water turbine, the vice chancellor of Sharif University Dr A. Salehi, awarded her with a second floor of the Ministry of Power in Tehran to locate her turbine team there for starting their research in the field of Design and Manufacture of Water Turbines for the first time in Iran.
- He also awarded her with two reference letters praising me for the research work I did under his supervision and supervision of another doctor in Turbine Design/Solar air conditioner Design and Manufacture. Dr Salehi was the Vice Chancellor of Sharif University of Technology as well as Deputy Minister for Power. He appointed me as his research assistant for research into Exploitation of Iranian Water Power. The research book is available to view now.



### **Training Engineers in SolidWorks, AutoCAD and TurboCAD 2016**

- Accomplished Certificate IV in Training and Assessment with competent results end July 2016. Trained 5 engineers and 5 other learners in SolidWorks, AutoCAD and TurboCAD and made 18 movies for them to learn these CAD skills not only in her sessions of training but at their offices too. One of these engineers used her movies and the 81 webinars links she provided for him to train the design staff at Aircraft Part Design company, he was working with.
- Another engineer used her training and the 85 webinars links to speak about at his job interview and got that job. The third engineer who was still unemployed started training himself using 84 webinars she provided for him and her training / motivation and a software she recommended to him to study by himself for becoming a Chief CAD Engineer.

### **Starting two businesses in 10 industries-Project Management**

- Achieved the status of entrepreneur by starting from scratch and building own Ewindfly business by working in 10 related industries of digital media, academic research in mechanical engineering, CAD drafting, Construction, Hospitality and tourism, Project Management Practice, Woods and Engineering, recruiting advice, Tutoring and Engineering Training and Assessment.
- Acquired 142 boarders under 40 and issued 30 pages policies and swapped technical work with over 60 home based projects for them over 6 years under new business of City Train Home. She was an effective project manager during that time, as most of their projects completed without labour cost and only 7% of our boarders disputed my policies, which proves her effective communication skills. She can apply project planning; time; cost; risk and quality management on all mechanical engineering
- Projects for successful outcomes.

### **Employment History**

- 9/ 1988 - 10/ 1988** **Project Mechanical Engineers, Mintrex Consulting Engineer, Kalgoorlie, WA,** and Design of 8 Conveyors for a mining consultancy company.
- 9/ 1980 - 9/ 1981** **Project Manager in Water Turbine & Solar Air conditioner, Power Ministry, [Tehran, Iran],** Translated the text book of Turbomachinery's by Dixon from English to Persian. Visited the Francis Turbine in city of Hamedan with the engineering team. Created a team of engineers to work on Design and manufacturing of Water Turbines. Designed, constructed and tested 3 Solar Heater collectors.
- 7/ 1996 - 6/ 1999** **Engineering Drawing Details/ Graphics lecturer, South Metropolitan TAFE, Thornlie, WA,**
- 4/ 2011 - Present** **Private Tutor of Mechanical Engineering, SolidWorks & AutoCAD, Physics, Maths, Statics, Dynamics, Solid Mechanics, Ewindfly, Leeming, WA,** <http://ewindfly.shubayr.net>
- 3/ 2004 - Present** **Project Management in Wind Turbine & Flywheel Energy Storage, Ewindfly, Leeming, WA,** <http://ewindfly.shubayr.net> Type in FES1, FES2 one at a time in the search box of my website, then see the two links.
- 10/ 1981 - 1/ 1985** **Project Standard Gearboxes CAD Engineer, IROST, and [Tehran, Iran],** Wrote a computer program of 1500 lines to develop a software for modelling of Standard Gear Boxes. Designed a Hydraulic Directional Solenoid valve for the Press Machine.
- 1/ 2016 - 1/ 2016** **"SolidWorks, AutoCAD, TurboCAD 2016, Table Saw" Trainer and Assessor, Ewindfly, Leeming, WA,** <http://ewindfly.shubayr.net> please click on Tab: "Engineering Education" and see CAD Training links.
- 4/ 2010 - 6/ 2016** **Director & Project Manager, City Train Home, Leeming, WA,** <http://rent.shubayr.net>
- 2/ 2008 - 3/ 2008** **Tutor and Demonstrator OF Physics Lab, , Murdoch University, Murdoch, WA,**
- 2/ 1990 - 12/ 1990** **Physics Tutor and lab demonstrator, Murdoch University, Murdoch, WA,**
- 2/ 1989 - 12/ 1989** **Calculus Lecturer, Curtin University, Kalgoorlie, WA,**

## Education

- 7/, 1988 **Master of Science, Mechanical Engineering [Applied Design]**  
*Shiraz University, Shiraz, Iran*  
GPA: 73%, Major GPA: 83%. Based on Government of Western Australia - Overseas Qualification Unit [OQU] this Qualification is assessed as comparable to the educational level of an Australian Master degree, Assessed by the Department of Education and Training. Achieved High Distinction Grade [83%] in Thesis for Research work [1.5 years full time] and completed course work [2 years] and in 3.5 years full time study achieved a G.P.A [Average 73%]. The research supervisor was Professor M.M. Alishahi [graduated with PhD from M.I.T. in USA].
- 2/, 1984 **Bachelor of Science, Mechanical Engineering - Solids design**  
*Sharif University of Technology, Tehran, Iran*  
GPA: 72%, Major GPA: 75S%. Based on Government of Western Australia - Overseas Qualification Unit [OQU] this Qualification is assessed as comparable to the educational level of an Australian Bachelor degree, Assessed by Department of Education and Training. Achieved Distinction Grade Point Average [G.P.A. = 72%] in Bachelor course. Mean grade in the department (1974 - 1985) = 65% Top grade in the department = 83%. Passing grade=50%.
- 7/, 2016 **Certificate IV in Training and Assessment**  
*South Metropolitan TAFE, Thornlie, WA*  
GPA: 100%, Major GPA: Achieved to complete a 6 months course with competent results at TAFE, which trained me to work as a lecturer at any Campuses of Australian TAFE.  
Achieved own Designed and Developed Website: <<http://ewindfly.shubayr.net>> with TAB Engineering Education for above movies and webinars in CAD Training.  
Trained and assessed 10 learners in SolidWorks 2016, AutoCAD 2016 and TurboCAD 2016.  
Made 18 short movies from training of 7 people in CAD- 3D.  
Made a web page with links to 85 webinars in AutoCAD.  
Made a web page with links to 81 webinars in SolidWorks.  
Made a web page with links to 84 webinars in TurboCAD 2D.  
Made a web page with links to 105 webinars in TurboCAD-3D.

## Additional Skills

- Research and Development
- Project Mechanical Design Engineer
- College Lecturer [ qualified Trainer / Assessor ] / University Tutor
- SolidWorks, AutoCAD, Drafter & Tutor & TurboCAD 2016 drafter and tutor
- Advanced Computer literate [MS Project, Visio, MS Excel, MS Word, MS Access 2016, ClickChart]
- Project Management Practice
- Mitre Saw, Table Saw, Driller, Angle Grinder, Lathe Machine, Milling Machine, Boring machine, Spray Painter, Wood Work, Timber Flooring, Workshop Skills

## Affiliations

- The Institution of Engineers, Association of Professional Engineers and Scientists, Perth, WA, 1/ 1990 - 1/ 1992.

## Training

- **Units of Competencies** studied with competent pass grades, Central Institute of Technology, Subiaco, WA, 1/ 2010 - 1/ 2010. AutoCAD 2010, SolidWorks 2010, Microsoft Word 2010, Excel 2010, Access 2010 and PowerPoint 2010. Achieved updated skills in Computer Aided design and Educational technology in 6 soft wares.

- **Certificate IV in Project Management Practice**, South Metropolitan TAFE - Thornlie, 7/ 2016 - 4/ 2017. Completed 7 out of nine units in this course Successfully so far. I am enrolled only in two units in semester 1, 2017. I would get this certificate by April end 2017.
- **Graduate Certificate of Education (TESOL)**, Edith Cowan University, Mount Lawley, WA, 2/ 2017 - 12/ 2017 [S1 & S2]. Enrolled in 2 units: "Understanding Language", "Using Language", which are two of the 4 units in this course for semester 1, 2017. After completion, she would be qualified to teach English to speakers of other languages. One unit is passed 60%, S1.

### Licenses

- Current WA Driving License, Class C.A., Department of Transport-Government of Western Australia, Perth, WA, 1/ 1990 - 1/ 2021.

### Honours

- **Overseas Qualification Assessment Advice**, Government of Western Australia, Department of Training and Workforce Development, Perth, WA, 1/ 2016 . On the basis of advice provided by the Department of Education and Training for qualification from Iran (Islamic Republic of). The Bachelor Science in Mechanical Engineering (Solid Designing) is assessed as comparable to the educational level of Australian Bachelor Degree.
- **Overseas Qualification Assessment Advice**, Government of Western Australia, Department of Training and Workforce Development, Perth, WA, 1/ 2016 . On the basis of advice provided by the Department of Education and Training for qualifications from Iran (Islamic Republic of). The Master of Science in Mechanical Engineering (Applied Design) is assessed as comparable to the educational level of an Australian Master Degree.
- **Score Confirmation Report**, Test of English as a Foreign Language, San Diego, California, USA, 1/ 1978. Achieved Total of 517 in TOEFL and was admitted to San Diego State University to study year 3 in Mechanical Engineering.
- **Referees Reports**, Iranian Academics & Academic Project Supervisors, Tehran, Shiraz- Iran, 1/ 1980 - 1/ 1988. To find this Referees Reports, please type R1 in the search box of <http://ewindfly.shubayr.net> and in "Afsaneh's Portfolio" web page that you see, click on link: Referees & Referees Reports. You would see why my interpersonal skills in engineering teams are distinguished and what attributes I have, which drives me faster and more efficient than other researchers. You can see a document, which you can even now, contact my referees and check if it these claims are true.
- **Enrolment Verification for Spring Semester 1979**, San Diego State University, San Diego, California, USA, 1/ 1979 - 1/ 1980. Was admitted to study year 3 and 4 of the Mechanical Engineering at San Diego State University.
- **Interpersonal Skills & Discipline**, Marjan Private Senior High School, Tehran, Iran, 1/ 1973 - 1/ 1974. Grade 90% was awarded to her in her Academic Records by the School Principle Mrs Mahpareh Mamaqany.
- **Graduate Diploma in Education Secondary Teaching Scholarship**, Education Department of Western Australia, Perth, WA, 11/ 1999 - 12/ 2000. Scholarship was to study one year graduate diploma in secondary Education, then work in remote area for two years.
- **Certificate in Teaching Skills Development Program**, Professor Jan Thomas, Deputy Vice Chancellor, Academic, Murdoch University, Murdoch, WA, 1/ 2008 - 1/ 2008. Attended a full day workshop in quality teaching in Physics Class.
- **Award Certificate on completion of the laboratory Demonstrator Training**: Teaching and Learning, Professor Jan Thomas, Deputy Vice Chancellor, Academic, 1/ 2008 - 1/ 2008.
- **GRE Test Scores, Graduate Record Examinations Educational Testing Service**, Iranzamin Tehran International School, Tehran, Iran, 1/ 1978 . Passed Aptitude and advanced tests in engineering with total score 530, then was admitted in San Diego State University.

- **Award for distinguished German Language Skills, Sharif University of Technology-Language Centre, Tehran Iran, 1/1984-5/ 1984.** Ability to continue her Master's degree in a German Speaking Country, as she achieved 93% and 80% in 4 credit units in German Language.
- **Letter of House Evaluation by Jennifer Gan from Pulse Realty** [28/08/2017] that Afsaneh Cooper's fully owned house in Leeming, WA, Australia has a current market value of \$650,000 as well as rental market value of \$400 per week.
- **Letter of ANZ Bank in Bull Creek, WA** [21/08/2017] that **Afsaneh Cooper's** Home Loan for her Leeming Property is only \$800 and her house is almost paid off.