## **Professional Curriculum Vitae (CV) of a Competent, Talented, Electrical Engineer FARAH ALVI**

#### **Personal Profile:**

Name: FARAH ALVI

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# Education History (starting from the highest level to the lowest level):

1) Level: PhD

Academic status : Currently Currently pursuing my PhD degree in Electrical Engineering from University of South Florida in the area of synthesis of Metal Oxide and Metal Nanostructures e.g. nanowires, nanoparticels and nanorings for photovoltaic applications.

2) Level: Master:

Academic status: Earned master in Electrical Engineering from University of South Florida in the area of thin film second generation CdTe solar cell( GPA=3.6)

Courses: Major courses taken by me are Materials and MEMS courses in Master.

 Level: Bachelor:
Academic status: I have passed Bachelor of Science degree in Electrical Engineering from University of Engineering and Technology Lahore Pakistan in year 2001 Marks: Got 753/1250 (approx. 3.00 GPA)/60.5 %/First division Courses: Major courses taken by me in these following areas of study Electrical, Electronics, communication and control engineering

# **Professional Engineering Employment Experience (possess unusual capability to perform outstandingly under any circumstances):**

Six years of professional technical engineering experience (at different levels and at different places) as a solid, successful, adaptable and persistent professional engineer. I worked on diverse assignments and engineering problems of different facets. I also worked in diverse capacities and under variable circumstances. I claim that I can handle any engineering related problem(of any nature and kind) and issue with full professional confidence and I have the abilities, imagination and performance to make a brilliant success story every time and in every task assign to me and in every project I undertake. I have the capability to handle, solve and address any engineering problem and I can demonstrate a depth (intensity) and breadth (diversity) of experiences. I have a proven ability to work independently, to stay on the leading edge, and to solve complex problems using a much more elaborate methodology. Because I always believe that bigger the challenge, the better the opportunity. There is no such word like failure in my whole engineering career and I believe in leading from the front. I strongly believe in accuracy, precision and standards. I am very vigilant in my field of expertise and I am with Drive and Passion.

# **Project Management Skills:**

I could demonstrate management aptitude because I have managed people, projects, resources or portfolios. Excellent skills in the following project management areas like:-

- Performing the management functions of planning, forecasting, organizing, leading, controlling and using technological innovations.
- I have become fully adept at taking the full advantage of the resources of money, materials, people and information (manual as well as computer based information systems.)
- I have acquired profound skills of managerial decision making at the strategic, tactical and operational levels.
- Full expertise on the policies, procedures, standards and guidelines of a corporate environment.
- Deep knowledge about the elements, scope and capabilities of an information system.
- I have ability to provide the clear vision, goals, strategies and measures to promote alignment and success.
- I am very well versed with a set of tools which a manager needs( for decision making process) in a corporate environment like applications development, data

management , modeling , statistical analysis , planning , inquiry , graphics , consolidations and application-specific capabilities , simulation capabilities , management feedback and management reports and inquiries.

## B English Competency Skills (Excellent communication skills):

I also have transferable skills in communications like persuasive speaking, negotiating, writing and analytical thinking.

### **Computer Competency Skills (Mastery of Computers):**

I can exhibit excellent computer competency skills in all the following areas.

- Computer Languages skills: C, C++, JAVA, Assembly
- I could confidently perform the job of a computer specialist(within the diversified job pool of information technology paradox) as a chief information officer, system analyst, programmer, network administrator, system programmer, database administrator, internet site specialist, computer operator, user liaison, pc specialist.

Other Professional Engineering intuitive Skills and techniques (I posses very well integrated skills from implementation point of view of the electrical engineering discipline. I have in-depth knowledge of engineering , ability to take in complex information and do things with it and also trained in how to extract ideas):

Thorough understanding and in depth knowledge (theoretical & practical) of the techniques, devices used, relevant theory and applications which are used in solving engineering problems.

1. Incredibly powerful technical engineering software packages skills in the context of the design & analysis of engineering systems: MATLAB (full command on the most popular toolboxes like signal and image processing, data analysis, control systems and math), PSPICE (for computer analysis of Electronic circuits), Electronics Workbench Multisim Software (command on the circuit simulation tool for the computer analysis of all kinds of electronic circuits).

- 2. Highest order engineering skills are there like development, design analysis, complex modeling, complex calculation design, computational skills, visualization skills and ability to do simulation of diverse and scientific engineering problems.
- 3. Deep understanding of all the modern industrial practices in the areas of electrical and electronics engineering.
- 4. Substantial knowledge of computer aided design (CAD) of the practical engineering systems.
- 5. Vast and in depth technical professional knowledge (from all the aspects) of all kinds of modern electronics devices and circuits.
- 6. In depth knowledge of the latest techniques of industrial automation (automatic control systems), intelligent manufacturing systems and process control instrumentation technology.
- 7. Know how of all the modern standards in quality management.
- 8. Experience and working knowledge of all the software and hardware components of data communication (telecommunication systems) and also having a sound grip on all the concepts of modern analog and digital communication systems.
- 9. Confident skills of the installation ,testing & operation of modern sophisticated electronic instrumentation (analog and digital) and the measurement, calibration, parameters setting, optimization, configuration, performance enhancement and maintenance of these equipment.
- 10. Thorough understanding of the techniques, devices used, relevant theory and applications which are used in solving engineering problems.
- 11. Intuitive understanding of CMOS VLSI Design
- 12. Analysis and design skills of power systems and power electronics
- 13. Well versed with the principles and practices of Digital Design.
- 14. Conversant with the hardware description languages (HDL) including Verilog as well as VHDL.
- 15. Full command on linear circuit analysis(resistive circuit analysis, time domain analysis, frequency domain analysis)
- 16. Intuitive understanding of circuit simulation techniques to characterize a process and to check performance, power and correctness of circuits and interconnect.
- 17. Have shown competence in the adaption of the successful problem solving strategies of the electrical engineering practical problems in the socio economic areas like air and water pollution, urban planning, mass transportation, the discovery of new energy sources and conservation of existing natural resources (oil and natural gas).
- 18. Sound knowledge in the core areas of electrical engineering like image processing/pattern recognition, VLSI, robotics, power electronics, artificial intelligence, digital signal processing, electrical machines and drives.

### **Personal Traits :**( Cultivated following skills in myself)

- Excellent personality traits like self motivation, intellectual capacity, personal maturity, perseverance, determination, integrity, creativity self confident and ability to get along with others(very good interactive capabilities) and conclusive
- Excellent interpersonal and oral- communication skills and also have a profound skills of oral presentation and report writing.
- Very good potential to assume a professional leadership role
- Demonstrated outstanding ability for independent work as well as ability to work with people from different backgrounds.
- Outstanding quantitative analysis and engineering problem solving skills.
- As I am a successful professional engineer (prominent in my field and of high professional standing) this is why I am focused, systematic, thorough, patient and responsive.
- Interesting, well- rounded, flexible, active and disciplined individual.
- Posses the necessary commitment and dedication for a job and also have the ability of structured thinking.

# **Cultivated Extracurricular Interests:**

- Playing and watching different games
- Watching English movies
- Reading books, magazines, technical journals and conference proceedings
- Technology incubation
- Community Services