

BEHRAD KATIRACHI

MECHANICAL ENGINEER

Van Nuys, CA 91411

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SUMMARY OF QUALIFICATIONS:

- **7 years of hands-on experience** as an **EIT certified Engineer** in design, fabrication and testing of **HVAC systems**, Steam systems, Refrigeration, Plumbing, Boilers, Chillers, HVAC controls, Fire protection, Duct systems, Condensers, Compressors, Pumps, Filters, valves, Heat exchangers, Strainers, Tanks, **Clean Rooms**, Air Locks, **MEP, Solar Systems** and etc.
- 6+ years of experience in modeling, stress and strain calculations and FEM analysis in different fields of Mechanical Engineering such as Heat transfer, Aerodynamics, Fluid Mechanics, Solid Mechanics and etc.
- Proficient in different mechanical and general software such as **Advanced AutoCAD 2D & 3D (9 years)**, **SolidWorks**, Carrier, ANSYS, DUCTSIZE, REFRIG, SPIPE, Working Model 3D, **DOE 2.2, TRACE 700**, MS Office, MS Excel and etc.
- Experience in onsite supervising and commissioning.
- Strong work ethics, time management, communication skills, client negotiation and team work.
- Familiar with ASME, DIN, ASHRAE & Bio-Safety codes.

CERTIFICATIONS:

- Engineer-In-Training, US-California Certification (**EIT/FE certified** by the California Board of Professional Engineers), 01/2010

PROFESSIONAL EXPERIENCE:

Solar System Designer

American Pacific Solar Inc. • U.S , Los Angeles 2010-Present

- Designing solar systems including photovoltaic systems and solar water heating system.

Project Engineer

Behyad Company • Iran, Tehran 2005-2009

- Performed the selection of equipments duct and pipe routing, detail design engineering of HVAC system involving heat load calculation, system testing, quality control, as-built preparation, system troubleshooting, Design reviews and preparation of drawing and specification of a 200,000 Sq. f., eight-story hospital building for Infant Medical **Hospital** of Tehran.
- Performed supervision on the accurate installation of all mechanical sections such as HVAC systems, Steam systems, Refrigeration, Plumbing, Boilers, Chillers, HVAC controls, Fire

protection, Duct systems, Pumps, valves, Heat exchangers and etc.

President / HVAC Designer

T.M.R Consulting Engineers Company • Iran, Tehran 2005-2009

- Management and detail design engineering of all mechanical systems and preparation of drawing and specification of different projects such as: City Park Project, Bandar Anzali Mosque Project, National **Research Laboratory** of Influenza and HIV Project and etc.

Project Engineer

Tares Construction Company • Iran, Tehran 2003-2004

- Performed supervision on the accurate installation of all mechanical sections such as HVAC systems, Steam systems, Plumbing, Boilers, Chillers, HVAC controls, Fire protection, Duct systems, Pumps, valves, Heat exchangers and etc. for a 8,000 Sq. f., of the Foreign Languages Department of Tehran **University**.

Research Assistant

Ministry of Energy (SABA) • Iran, Tehran 2002-2003

- Researched on energy consumption level of the imported and internal electrical appliances to find the level of compatibility of those with international standards.
- Performed an energy consumption optimization for thermoelectric washing machines.
- Established the national energy labeling standard for the air conditioners.

EDUCATION:

- **Master of Science in Mechanical Engineering 2004-2005**
Curtin University of Technology • Australia, Perth
- **Bachelor of Science in Mechanical Engineering 1999-2003**
Azad University of Technology • Iran, Tehran

ACHEIVEMENTS:

- Designed modeled and analyzed the structure and all the mechanical fixtures of an huge umbrella (180 ft X 180 ft) by SolidWorks software through Finite Element Method.
- Designed, implemented and tested a Hilsch-Ranque Vortex tube as Master's Degree thesis.
- Achieved energy conference award for writing a paper on saving energy and using thermoelectric materials in washing machines.
- Completed courses and achieved certificates for Advanced **AutoCAD, Solid Works, Carrier** and **ANSYS**.
- Designed and constructed the National Research Laboratory of Influenza and HIV at Tehran University with 500 Sq.f of laboratory space. Laboratories were designed for BSL-4 grade. All HVAC and plumbing systems besides air locks and air pressure balancing were designed according to the ASHRAE and Bio-Safety codes.