

VINIT KENI

Mechanical Engineer

India – 07 August 1988



Summary

I am a competent Mechanical Engineering professional with a master's degree (MS) in Power Engineering from Brandenburg University of Technology, Cottbus, Germany. I aim to perform with paramount efforts and to utilize my technical knowledge and skills in the field of Thermal, Automotive product development and FEA to enable the application of concepts to practicality while fulfilling the goals of the business and the organization. Also, I have broad industrial work experience including Heavy Machinery, Oil and gas, Energy, Automobile sector with strong Project management skills. I am a self-motivated person who likes to take all challenges with passion to learn and develop new skills, strong technical skills and proficient analysis skills (CAE).

Work Experience

Oct/2014 – Jan/2018 **Master of Science (MS) in Power Engineering (university Profile)**

Brandenburgische Technische Universität (BTU), Cottbus-Senftenberg, Germany.

The focus of the master's program was on the concept of safe, affordable and environmental friendly energy generation as one of the most urgent global challenges of the 21st century. The program covers the entire spectrum of energy research in the field of traditional as well as renewable energies with Thermal Engineering background and is highly industry-oriented. The specialization of my study was "Power generation from fossils and renewable fuels."

Internship and Scientific Research Assistant

Fraunhofer Institute for Solar Energy system, Freiburg, Germany.

Thesis Topic: Assessment of thermal energy storage in solar process heat systems

Main activities and responsibilities are:

- Assessment of latent heat storages for the applications in thermal industrial processes and systems with the help of system simulation.
- Preparation of hydraulic schemes for the industrial process heat systems
- Component, sub component and full system FE analysis of solar thermal system in ColSim simulation environment (CAE tool).

- Design of latent heat storages for the integration into energy efficient applications in thermal industrial processes and power plant which also includes the design of shell and tube heat exchanger.
- Design and Modelling of components such as pump, heat storage, steam drum, boiler, heat exchanger by thermodynamic calculation (energy, temperature, pressure, density, material composition).
- Perform thermodynamic calculation of fluid properties in FLUIDPROP. It is a standard interface to several software libraries for the calculation of thermodynamic and transport properties of fluid.
- Validation of the components (pump, heat storage, steam drum, boiler, heat exchanger) along with the complete system with real data.
- Perform mass and energy balance calculations for continuity of the system at each time step of the simulation.
- Develop the control strategy for the switching function of the two systems i.e. Conventional system (with Steam boiler) and Renewable system (Solar).
- Perform and handle different optimisation options (sizes of equipments and load functions) of the whole hydraulic system with functionality, design criteria as well as the economic consideration.
- Thermal Model development of components for power plant and industrial processes applications such as solar field, Pump, Heat storage, steam drum, boiler by thermodynamic calculation.
- Perform Annual System simulations based on steady-state and dynamic processes for the different parameters.
- Optimisation of the whole process for the objective function based on the economic analysis

Jul/2011–Sep/2014

Assistant Engineer – Projects,

M/s. Toyo Engineering India Ltd. Mumbai

Engineering, procurement and construction (EPC) company in oil & gas, petrochemical, chemical and fertilizer industrial sector

Major activities and responsibilities:

- Planning and execution of the EPC project of Liquefied Natural Gas (LNG) processing plant.
- Execute and Co-ordinate LNG processing project which includes construction management, Tracking of schedules, costs and quality
- Tender study bid evaluation and tabulation, Cost estimation for different projects in oil and gas, energy, refinery, petrochemical sector, Preparation of enquiry for the work, analysis of technical and commercial offers from the contractors.

Sep/2007–Aug/2008 **Junior Engineer Trainee**, M/s. Larsen and Toubro Ltd., Mumbai, India
Heavy Engineering Works (Defense, Nuclear, Aerospace division)

Main activities and responsibilities:

- Worked on a project “assembly of Multi Barrel Rocket Launcher (MBRL)” for the Indian army (DRDO).
- Supervising and planning of day to day activities on shop floor as a part of project management group(PMG)

Academic Profile

Qualification	Period	Name of Institute	University	Percentage
M Sc./ M.S. (Power Engineering)	Oct./2014- Apr/2017	Brandenburgische Technische Universität (BTU), Cottbus–Senftenberg, Germany	BTU Cottbus, Germany	1.3 (Equivalent to 90 % - 95%)
B.E (Mechanical Engineering)	Aug/2008- July/2011	Finolex Academy of Management & Technology (FAMT), Ratnagiri	Mumbai University	80.93 %
Diploma in Mechanical Engineering	Aug/2004- July/2007	Govt. Polytechnic Ratnagiri	M.S.B.T.E.	72.37 %
Secondary school certificate exam	May 2004	Phatak High School, Ratnagiri	Kolhapur Board	82%

Software Skills

ANSYS

AutoCAD (2D/3D), Basic knowledge of Unigraphics NX

Simulation Environment: ColSim (Developed at Fraunhofer Research
Institute Germany)

Programming language: C/C++,

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Language Skills

English:	Fluent in verbal and written
Hindi:	Fluent in verbal and written
German	Very good knowledge (B2)
Marathi:	Mother tongue

Key Achievement

- Third rank in Bachelor of Mechanical Engineering in Mumbai University, India

Pune, India



(Vinit Keni)