

Sudheesh Sureshkumar – Rodelbergweg 6 - 12437 Berlin
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Application for Simulation/ Berechnungsingenieur at Jencad



Sudheesh Sureshkumar

MSc. Structural Mechanics engineer with 5.5 years' experience on modelling and calculation of complex multibody systems, aero elasticity, finite element and composite light weight structures.

Curriculum Vitae

Sudheesh Sureshkumar

19.08.1988 in Kerala, India

Citizenship: Indian. Visa: German Permanent Residence (Niederlassungserlaubnis).

Work Experience

May 2017 until now

Director of Technology,

Elpro/ enbreeze GmbH, Berlin

Responsible for research, development and technical decisions making at enbreeze GmbH.

Project and Resource Management, Type 2 Certification of enbreeze 15 kW. Test and Validation of enbreeze passive pitch on 15 kW prototype. Measurements and Aeroelastic load comparison in the 15 kW prototype. Benchmarking, loads and planning the series production of the turbine in international markets. Responsible for technical enquiries from customers.

Work Patent (Pending): (Patent number DE10 2017 004 909.2)

Nov 2013 – May 2017

Research and Development Team lead: Aeroelastic Simulation and Finite Element method

Elpro/ enbreeze GmbH, Berlin

Aeroelastic design and testing of 3 small wind turbines according to IEC 61400-2 small wind turbine standards.

Finite element simulation of Complex rotor blade root connections, calculation and modelling of complex light weight composite structure. Design, Calculation and Testing of enbreeze passive pitch system. . Aeroelastic modelling and loads simulation of 15 kW, 10 kW and 1.6 kW HAWT with HAWC2. Multibody simulations of complex systems. Structural modelling of composite modelling of rotor blades using BECAS. FEM using ANSYS Workbench and CFD using CFX.

Feb 2013 – Sept 2013

Master Thesis: Aeroelastic Simulation of small wind turbine using HAWC2 (German grade equivalent 1.0)

enbreeze GmbH, Cologne

Structural Model: Multibody Dynamics (HAWC2), Aerodynamics: ANSYS CFX, BEM (HAWC2), Wind Turbulence: Windap. DELPHI based external DLLs, BECAS for Blade Composite Modelling.

July 2012 – Jan 2013

Structural Engineer Intern
enbreeze GmbH, Cologne

Design and calculation of Nacelle and Structural Frame for 1.6 kW small wind turbine.

Aug 2010 – Feb 2011

Guest Lecturer: Computational Engineering
Department of Mechanical Engineering, LBS College of Engineering, Kasaragod, India

Dec 2009 – Feb 2010

Internship: Calibration of Industrial Gas Flowmeters
Fluid Control Research Institute, India

EDUCATION

2011 – 2013

Master of Science Mechanical Engineering with emphasis on Structural Mechanics (German grade equivalent 1.7)
Blekinge Institute of Technology, Karlskrona, Sweden.

2006 – 2010

Bachelor of Technology: Mechanical Engineering (Top 0.1 % of the university graduates, Distinction with Honors)
Kannur University, India

INTERNATIONAL ACHIEVEMENTS

March 2010

Runners up, Best Paper presenter Asia Pacific Region
American Society of Mechanical Engineers, Goa, India

June 2011

International Organizer Team
World Student Environmental Summit 2011

OTHER QUALIFICATIONS

Software

HAWC2, BLADED, FAST, SIMPACK, ANSYS, ABAQUS, MATLAB, SIM-SCALE, DELPHI, PYTHON, QBLADE, AUTODESK INVENTOR, MATHCAD, MICROSOFT OFFICE TOOLS, CFX, BECAS, NUMAD, BeamDyn.

Languages

German (B2), English (Native), Malayalam (Mother Tongue), Hindi (Fluent), Tamil (Fluent), Swedish (Basic).