

Sunag R A **Masters in Erasmus Mundus Computational Mechanics** 

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#### **EDUCATION**

# ECOLE CENTRALE DE NANTES – 2<sup>nd</sup> year Computational Mechanics - (09/2017 – 08/2018)

Specialization: CFD, Turbulence, Model Reduction, Coupled Problems, Iterative solvers.

#### SWANSEA UNIVERSITY – 1<sup>st</sup> year Computational Mechanics – (09/2016 – 08/2017)

Specialization: Numerical Methods, Advanced Fluid Mechanics, FSI, FEM, Continuum mechanics.

BMS INSTITUTE OF TECHNOLOGY – Bachelor of Mechanical Engineering – (09/2018-09/2012)

# CENTRALE NANTES





#### **SKILLS**

- PROGRAMMING: Coursework projects using Matlab, Python, C++. External projects on CFD using Matlab, C++ and Opemfoam through Skill-lync (e-learning website - https://projects.skill-lync.com/profiles/Ra-Sunag-778).
- SIMULATION: FINE/MARINE (Master thesis, Academic projects on CFD), Basic in OpenFoam, Basic in Ansys.
- **MESHING:** HexPress, IGG mesh, Basic in Ansys, Basic in OpenFoam blockmesh.
- POST-PROCESSING: TecPlot (fluent in 2D, Basic in 3D), ParaView (Basic), GnuPlot(Basic), Ansys (Basic).
- **CURRENT & FUTURE PROJECTS:** Turbomachinery simulations using Converge CFD through Skill-lync ( https://courses.skill-lync.com/course/advanced-turbomachinery-cfd-simulations) involving Centrifugal pump analysis, supercharger flow analysis, Python for CFD and FVM for CFD using C++.



- LANGUAGES: French (Basic), Fluent in English (Fluent), Kannada (Native), Hindi (Regional).
- OTHER: Linux, LaTeX, Adobe Photoshop CS5.

#### **WORK EXPERIENCE**

#### JINDAL STEEL WORKS - Junior Mechanical Maintenance Manager - (11/2012-07/2015)

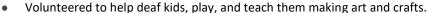
Lead a team of 10 technicians in each work shift by guiding, motivating, and training them towards the maintenance of Coke dry Quenching (CDQ) plant which led to my promotion after 1 year of work.



Adapted in maintaining flow of work between departments, resolving departmental conflicts and technical issues. Successfully completed annual shutdown of CDQ3 and CDQ4 unit along with checklist documentation.

### SWANSEA UNIVERSITY - Part time jobs - Swansea, United Kingdom - (09/2016-08/2017)

Worked as Student Ambassador and Student Employability Representative where my role was to inspire new students to enroll in University and connect students to University employability team for Job Oriented training.



Worked in the Oriel Science museum to enrich science knowledge for young students.

# Swansea University Prifysgol

#### **PROJECTS**

- Master Thesis: "Assessment of Numerical Simulations for the Prediction of Transitional flows". The simulation involved the study of validation of transitional flow in 2D Flat plate and Airfoil. The project involves design, Mesh optimization, Post-Processing to validate with experimental results. (03/18 – 08/18).
- Academic: Fotran Analysis of 1D Navier-stokes Incompressible flow, Python scripting for result atomization, Turbulent flow analysis of 2D NACA0012 and AGARD 303 Profile. FSI Analysis on NACA0012 and Dam-break flow analysis.
- Group project was done on study of Fluidic Thrust Vectoring through Nozzle throat Skewing method in Bachelor project at National Aerospace Laboratories, India. My role was to mesh and analyse the optimized design.



#### **ACTIVITIES AND INTERESTS**

- Sergeant-at-arms for the year 2016/17 for Rotaract Bangalore South parade (A Social service Community).
- Trekking, Badminton and Classical Guitar.



