ABHIMANYU SHARAN

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EDUCATION

Pennsylvania State University, GPA: 4.0/4.0   Expected Dec 2023
M.S. in Mechanical Engineering   *University Park, PA, USA*

· **Current Project:** Modelling of Electroluminescent Cooling
· Courses focused on: Fluid Mechanics, Heat Transfer, Mathematics and Numerical Methods.
· Also work as a **Graduate Teaching Assistant** for the Engineering Thermodynamics course.

PES University, GPA: 9.07/10.0   2014 - 2018
B.Tech. in Mechanical Engineering   *Bengaluru, India*

· Branch rank: 6. Received merit scholarship awards and distinction cash prizes every semester.
· Specialization in Thermo-Fluids Engineering and Minor degree in Electronics and Communication.
· **Project**: Analysis and Optimization of a Three-Fluid Cross-Flow Heat Exchanger using Finite
Element Analysis and Genetic Algorithm (2 publications)

EXPERIENCE

Weir EnSci   Jul 2018 – Mar 2020
Mechanical Engineer   *Bengaluru, India*

· **Major Projects:** 3D Modular structure generation for crushers, screens and pump-set assemblies for
the Engineering Automation and Plant Solutions teams. Won a "Star Team Member Award" for
achieving a weight reduction of 42% for the Jaw Crusher module and 17% for the Vibrating Grizzly
Feeder module.
· **Minor Project:** Centrifugal pump selection for slurry transportation along with piping layout design
· Helped train new members, prepared technical documentation of best automation practices of the
Modular Plant Engineering team.
· Attended courses on Drawings and Standards, Lean Manufacturing, Geometrical Dimensioning and
Tolerancing, innovation, manufacturing processes and more.

RECOUP Hospital   Apr 2020 – Dec 2021
Consultant Ergonomist and Manager - Corporate Services   *Bengaluru, India*

· Identified risk factors when remote computer users interact with their systems. Completed
assessments for 300+ clients.
· Ergonomic workplace assessments of clients in the semiconductor research and food manufacturing
industries
· Fixed tie-ups with new corporate clients and product vendors to aid business development

Toyota Industries Engine India   Jun - Jul 2016
Intern   *Jigani, Karnataka, India*

· Observed various CNC machining processes and the safety measures to be taken in the engine plant.
· Identified causes for coolant leakages in the cylinder head machining line and suggested control
measures that helped reduce coolant loss by up to 25% per shift.

CERTIFICATIONS

- AMCAT Employability Certifications in **Business Analyst, Business Consultant, English Proficiency, English Comprehension and Data Processing Specialist** profiles.
- **Certified Ergonomic Assessment Specialist** (CEAS III) for Practice and Management of Occupational Ergonomics from The Back School, Atlanta.
- Coursera certificate courses in **Python, Applied Data Science, Django** (non-certificate), **PostgreSQL** (non-certificate) from University of Michigan, and **Machine Learning** from Stanford University.
- Software skill certifications on HackerRank for Python, Java, Javascript and Problem Solving.
- Certificate course on **Mechanical Vibration Analysis using Computing Techniques** from PES University.

SKILLS

Scripting	MATLAB and Python
Computer Aided Design	Siemens NX, SolidEdge, Autodesk Fusion 360
Numerical Computation (CFD, FEA)	Ansys, COMSOL
Interests	Mathematics, Thermal Sciences, Programming

PUBLICATIONS

- Jyothiprakash, K. H., Sharan, A., Harshith, J., Krishna, V., Seetharamu, K. N., & Krishnegowda, Y. T. (2018). **Combined effect of ambient heat-in-leak and longitudinal wall conduction on the performance of three-fluid cross-flow heat exchanger.** In 5th International Conference on Computational Methods for Thermal Problems (pp. 55–58).
- Jyothiprakash, K. H., Harshith, J., Sharan, A., Seetharamu, K. N., & Krishnegowda, Y. T. (2019). **Thermodynamic Optimization of Three-Fluid Cross-Flow Heat Exchanger Using GA and PSO Heuristics.** Thermal Science and Engineering Progress, 11, 289–301. *https://doi.org/10.1016/j.tsep.2019.04.009*