APAAR SHANKER

Ph.D., College of Computing, Georgia Tech

@ ashanker9@gatech.edu 📞 404-955-2251 📍 Atlanta, GA in https://www.linkedin.com/in/apaar-shanker-47098252
🐙 https://github.com/materialsinnovation

RESEARCH STATEMENT

Application of Machine Learning and Big Data techniques to develop predictive process-sturcture-property linkages for automation and accelaration of material manufacturing cycle.

PROJECTS

PyMKS Python Project Development
NIST, Georgia Tech

📅 May 2017 – Ongoing   📍 Gaithersburg, MD

- 🐙 https://github.com/wd15/fmks

High Throughput Selection of 2D Nanoporous Zeolites
NSF, Georgia Tech

📅 Sep 2016 – ongoing   📍 Georgia Tech, Atlanta

- Controlled.

Surrogate, Predictive models for Microstructure Evolution
NIST, Georgia Tech

📅 Jan 2017 – ongoing   📍 Georgia Tech, Atlanta

Modeling Alloy Solidification in presence of Convection
IISc

📅 Sep 2014 – May 2016   📍 Bangalore, India

- Developed a multiphysics PDE solver over 15 months to simulate alloy solidification in presence of fluid flow.
- Coded entirely in C,with full parallelization implemented using **MPI** and run on 1000 processors at the supercomputing facility.
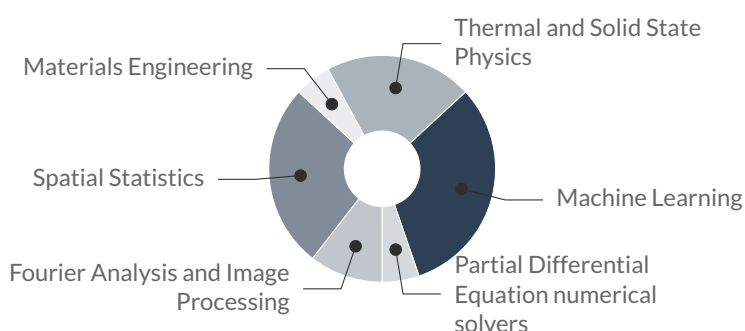
Gas Turbine Blades Repair
GE India Technology Center

📅 May 2014 – Sep 2014   📍 Bangalore, India

- Modified repair protocols for the industrial Gas Turbine frames based on structural and material analysis of components resulting in savings to the tune of $2 million for the company.

CORE RESEARCH AREAS

EDUCATION

P.h.D. in Computational Science and Engineering
Georgia Institute of Technology

📅 Aug 2016 – ongoing

M.S. and B.S. in Materials Science
Indian Institute of Science, Bangalore

📅 Aug 2011 – June 2016 📍 First Class

CURRICULARS

🏆 **J. N. Tata Endowment Scholarship for Higer Education Awarded in 2016**

🏆 **INSPIRE Scholarship**
Awared by Dept. of Science and Tech., Govt. of India, 2011-2016

GRE: 337/340

EXTRACURRICULARS

🏆 **Senator, Georgia Tech Student Government Assoc.**

🏆 **Executive Team Member, Event Commite at Georgia Tech SGA**

SKILLS/STRENGTHS

Machine Learning: Sklearn, Keras, Torch

Phasefield Modeling and Fluid Dynamics

Molecular Dynamics

Parallel Programming-MPI

Functional Programing

Linux   Python   C   Matlab/Ocatve

INTERESTS/HOBIES

History   Economics   Badminton

CONFERENCES

CHIMAD, Phasefield V
Northwestern University

📅 Aug 2017