Sriram Krishnaswamy

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EDUCATION

UNIVERSITY OF FLORIDA
MS Mechanical Engineering
May 2016 | Gainesville, FL
Cum. GPA: 3.06 / 4.0

BITS, PILANI
MSc Chemistry
BE Mechanical Engineering
May 2014 | Hyderabad, India
Cum. GPA: 7.54 / 10.0
Major GPA: 8.07 / 10.0

DAV BOYS, GOPALAPURAM
Grad. May 2009 | Chennai, India

LINKS

Github:// sriramkswamy
LinkedIn:// sriramkswamy
SSL:// Stochastic Systems Lab

COURSEWORK

GRADUATE
Fluid Mechanics II
Fluid Mechanics I
Gas Turbines and Jet Engines
Incompressible flow
Control Systems

UNDERGRADUATE
Fluid Mechanics
Numerical Methods
Applied Thermodynamics
Mechanics of Solids
CAD and FEA
Linear Algebra
Differential Calculus
Integral Calculus

SKILLS

PROGRAMMING
C • C++ • Python •
Shell • MATLAB • LaTeX

LIBRARIES
Boost • Trilinos

PARALLEL LIBRARIES
Intel MPI • Intel OpenMP

SOFTWARES
ICEM CFD • FLUENT •
ANSYS • OpenFOAM

EXPERIENCE

NUMECA INTERNATIONAL | Application Engineer Intern
September 2015 - Present | Brussels, Belgium

INDIAN INSTITUTE OF SCIENCE | Summer Intern
May 2012 – July 2012 | Bangalore, India

- Vibrational analysis of human body based on Lumped parameter models.
- Simulated the effects aircraft seat ejection in SimuLink and MATLAB.

RESEARCH

STOCHASTIC SYSTEMS LABORATORY | Graduate Researcher
Nov 2014 – Aug 2015 | Gainesville, FL

- Worked with Dr. Yifei Sun and Prof. Mrinal Kumar to create a Parallel Fokker-Planck equation solver based on CPD Tensor methods.
- Simulated a 5 dimension 2 body problem

THERMAL TURBOMACHINES LABORATORY | Honors Thesis
June 2013 – May 2014 | Gainesville, FL

- Automated the CFD analysis of airfoils using Python and Scheme.
- Implemented intelligent data interpretation and post-processing.
- Used it analyze the effects of Synthetic jet active flow control in airfoils.
- Collaborated with Shubham Jain to analyze the effects of Gurney Flap.

PROJECTS

CANSAT 2013 | Team Leader
Nov 2012 – June 2013 | Abilene, TX

- Led Team Varuna - the first team from BITS, Pilani to a successful launch.
- Scored 97.15% in the Critical Design Review
- Raised a sponsorship of $1,500 and presented the design to the Director of ISRO

CFD PYTHON SOLVER | Independent Project
June 2015 – Present | Gainesville, FL

- Python based solver for solving 2D Heat equation.
- Based on the CFD course by Prof. Lorena Barba
- Parallelizing the code using mpi4py package.

HOVERCRAFT DESIGN | SAE India
Jan 2012 – May 2012 | Hyderabad, India
Designed, analyzed and fabricated a single-seater Hovercraft capable of lifting 180 pounds and completed manned tests for levitation. Raised a sponsorship of INR 15,000 for the same.

PUBLICATIONS

[1] S. Jain, S. Krishnaswamy, and N. Sitaram. Computational investigations on the effects of gurney flap on airfoil aerodynamics. *International Scholarly Research Notices*, 2015.

[2] S. Krishnaswamy, S. Jain, and N. Sitaram. Exhaustive analysis of gurney flap as a passive control mechanism. In *Fluid Mechanics and Fluid Power, IIT Kanpur*, 2014.