

VIKRAM V. GARG

vikram.v.garg@gmail.com

<https://vikramvgarg.github.io/>

EDUCATION

The University of Texas at Austin

PhD, Computational and Applied Mathematics, August 2012

Graduate School Continuing Fellowship, 2011-2012

The University of Texas at Austin

GPA: 3.97/4.00

Bachelor of Science, Aerospace Engineering, May 2007

Bachelor of Science, Pure Mathematics, May 2007

EXPERIENCE

The University of Texas at Austin

September 2014 - August 2017

Postdoctoral Associate

- Designed optimal experiments to provide maximally informative data for predictive ocean modeling.
- Devised novel algorithms which improved accuracy of complex flow simulation by an order of magnitude.

Massachusetts Institute of Technology

September 2012 - August 2014

Postdoctoral Associate

- Developed a novel inference algorithm which can decrease the cost of using expensive models by 33%.
- Invented a density estimator which robustly infers heavy tailed distributions avoiding heuristics.

The University of Texas at Austin

September 2009 - August 2012

Graduate Research Assistant

- Developed the first flexibly incremental Latin Hypercube sampling algorithm for statistical analysis.
- Enhanced popular C++ simulation library `libMesh` with state-of-the-art numerical analysis methods.

SKILLS

Computer Languages

C++, MATLAB, R

Software & Tools

Tecplot, Paraview, LaTeX

SCHOLARLY ACHIEVEMENTS & CONTRIBUTIONS

- Authored six articles in peer reviewed journals such as ‘Journal of the American Statistical Association’, ‘Oceanography’ and ‘Computer Methods in Applied Mechanics & Engineering’.
- Reviewer for sixteen scientific articles in journals such as ‘SIAM Journal on Scientific Computing’, ‘Numerische Mathematik’ and ‘Computers & Mathematics with Applications’.

OTHER

- Assistant Instructor: ‘Computational Methods in Aerospace Engineering’ - Massachusetts Institute of Technology, Spring 2013 & 2014.
- Published author in one of India’s largest business newspapers ‘Livemint’.
- Leadership role in Association for India’s Development, a 501(c)(3) charitable organization.

Visa Status: Authorized to work in the United States. No visa sponsorship needed.