Dr. Sindhura Gangireddy

(https://sgangireddy4.github.io/Own-website/)

CPI: 9.16/10.00

GPA: 3.89/4.00

EDUCATION

B.Tech. - IIT Bombay, India (Metall. Engg. Mat. Sci) 2007

M.S. - University of Michigan, Ann Arbor (Mat. Sci. Eng.) 2009

Ph.D. - University of Michigan, Ann Arbor (Mat. Sci. Eng.) 2012

STRENGTHS

Problem Solving, Logic, Presentations, Independent Research/Work-Direction, Team Leadership.

CODING CLASSWORK/SKILLS

BootCamp: Web Development Full Stack Program (Kal Academy, Bellevue, WA)

- Web Programming Fundamentals: JavaScript, Angular, React
- Server-side Programming: Node.js and Databases

Coursework

- Datastructures and Algorithm Analysis University of Michigan, Coursera
- Python: Programming for Everybody University of Michigan, Coursera
- Introduction to Programming with Matlab Vanderbilt University, Coursera
- Basics of Fortran IIT Bombay
- Introduction to C++: NIIT, India
- HTML, CSS, Javascript for Web Developers John Hopkins University, Coursera

WORK EXPERIENCE

Army Research Lab -AMMPI (2017 -2018)

Research scientist

- Coordinated a collaborative project between 6 scientists at ARL and 9 faculty at UNT, in an explorative study assessing potential of new generation materials high entropy alloys, additive lattice structures.
- Lead an independent research team of 5 and established correlations between strain rate sensitivity, dynamic behavior, shear localization tendencies and microstructure/processing conditions.
- Published 9 first-author journal articles in the span of 1.5 years.

NIST, Gaithersburg MD (2015 – 2017)

Postdoctoral researcher

- Worked under the prestigious White House funded Materials Genome Initiative for rapid introduction of new materials into industry.
- Generated improved constitutive models to simulate dynamic behavior and created Gangireddy modification factor to Johnson-Cook model for gradual phase transformations.

Efficient Carbon Mgmt. Solns., Hyderabad, India (2012 – 2014)

Chief Technology Consultant

- Handled project execution including feasibility studies, generation of energy projections and financial predictions including cost modeling for large scale solar photovoltaic power projects.
- Created tools for generating loss optimization and layout designing.

AWARDS AND FELLOWSHIPS

- I.I.T. Bombay academic award for outstanding performance.
- Pratibha fellowship for academic excellence from Indian government.
- Rackham pre-doctoral fellowship.
- Nominations for Sarah Parker prize and Lipschutz award.

PUBLICATIONS AND CONFERENCE PAPERS

18 first author journal articles: https://scholar.google.com/citations?user=1Z-ICPoAAAAJ

- Ultra High Temperature Ceramics Conference, Lake Tahoe, CA (Aug '08)
- Materials Science and Technology MS&T 2008 Conference, Pittsburgh, PA (Oct '08)
- International Conference on Advanced Ceramics & Composites (ICACC), Daytona, FL (Jan '09)
- Materials Science and Technology MS&T 2009 Conference, Pittsburgh, PA (Oct '09)
- Gordon Research Conference, New London, NH (Aug '10)
- Materials Science and Technology MS&T 2010 Conference, Houston, TX (Oct '10)
- SEM Annual Conference & Exposition on Experimental and Applied Mechanics, CT: (June '11)
- Materials Science and Technology MS&T 2011 Conference, Columbus, OH (Oct '11)
- SEMXIII International Congress on Experimental and Applied Mechanics, Orlando FL: (June '16)
- The Minerals, Metals and Materials Society TMS 2017, San Diego CA (Feb '17).
- SEMXIII International Congress on Experimental and Applied Mechanics, Orlando FL: (June '16)
- SEM Annual Conference & Exposition on Experimental and Applied Mechanics, IN: (June '17)
- The Minerals, Metals and Materials Society TMS 2018, Phoenix, AZ (Mar '18).

EXTRACURRICULAR INTERESTS

- Member of editorial board of Journal of Thermal science and engineering.
- Active member at Aarthi Home for orphaned children and women rehabilitation program, India.
- Elected director of executive board in University of Michigan Engineering Council (UMEC).
- Assistant-editor and founding member of newsletter, Dhatuki, I.I.T. Bombay.
- Hobbies: Stock trading, oil painting, traveling.