

# Daniel J. Magee

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## EDUCATION

### Oregon State University, Corvallis, Oregon, USA

- M.S. in Mechanical Engineering Apr 2016- Jun 2018
  - Adviser: Prof. Kyle Niemeyer
  - Focus: Thermal-fluid sciences; CFD; numerical methods; Parallel, GPU, and heterogeneous computing.
- B.S. in Mechanical Engineering Jun 2012- Mar 2016
  - Cumulative GPA: 3.78 / 4.0

### Temple University, Philadelphia, Pennsylvania, USA

- BS in English May 2002- May 2006
  - Cumulative GPA: 3.42 / 4.00

## SKILLS

**Software:** MATLAB, Python, CUDA, C/C++, Linux Command Line, Markdown, HTML, git,  $\LaTeX$ , OpenMP, MPI

**Technical:** Statistics, Generalized linear models, Numerical analysis, Algorithms, Dynamic programming, Computer hardware, Thermal-Fluid Transport, Thermodynamics

## PUBLICATIONS

D. Magee and K. Niemeyer, “An initial investigation of the performance of GPU-based swept time-space decomposition,” in *55th AIAA Aerospace Sciences Meeting, AIAA SciTech Forum*, Grapevine, TX, USA, Jan 2017.

D. Magee and K. Niemeyer, “Accelerating solutions of PDEs with GPU-based swept time-space decomposition,” In preparation, May 2017

## WORK EXPERIENCE

### Oregon State University, Corvallis, Oregon, USA

- Graduate Research Assistant, Niemeyer Research Group, Mar 2016- present
  - Developing communication-avoiding algorithms for CPU and GPU architectures and heterogeneous compute clusters to accelerate the performance of explicit, time-stepping numerical schemes for partial differential equations.
  - Designing experiments for empirical analysis of parallel algorithms using python and CUDA.
- Teaching Assistant, Jun 2013- Mar 2016
  - ENGR 112: MATLAB - 6 semesters
  - ME 499/599: Python - 1 semester
  - ME 317: Intermediate Dynamics - 1 semester

### HP Inc., Corvallis, Oregon, USA

- Process Engineering Intern Mar 2015- Sep 2015
  - Developed experiments and analytical procedures involving linear regression and curve fitting to characterize adhesive cure process.
  - Designed fixtures for Helium leak testing and geometric analysis of delicate component.

### Daimler Trucks North America, Corvallis, Oregon, USA

- Facilities Engineering Intern Mar 2014- Sep 2014
  - Analyzed and mapped compressed air system throughout ten-acre facility and recommended specific improvements.
  - Designed and managed bidding process for automated spray system in electrophoretic coating process.