

# Steffen W. R. Werner

Assistant Professor at Virginia Polytechnic Institute and State University (Virginia Tech), USA

#### Personal Info —

\* Birthday
September 6, 1992
in Stendal, Germany

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Website
https://ninsteve.github.io

# Programming Skills ———

**MATLAB** 

• • • • • Expert

LaTeX

• • • • • Expert

**Python** 

Advanced

C

• • • • • intermediate

## Languages -

German

● ● ● ● ● Mother tongue

English



Steffen W. R. Werner is an encouraged young researcher active in the fields of scientific machine learning and model order reduction, involving numerical linear algebra and scientific computing. During his scientific career, he published 20 journal articles, 3 book chapters, 10 conference papers, as well as 3 open-source software packages.

# **Professional Experience**

Assistant professor, since 08/2023 Virginia Polytechnic Institute and State University, USA. 09/2021-08/2023 Postdoctoral associate, Courant Institute, New York University, USA. Doctoral researcher, 10/2016-08/2021 Max Planck Institute Magdeburg, Germany. 05/2016-09/2016. Student employee. 10/2014-01/2016 Max Planck Institute Magdeburg, Germany. • Development and maintenance of MATLAB toolboxes. 01/2016-04/2016 Industrial intern, proALPHA Business Solutions GmbH, Germany. Application programming. Analysis of modern version control systems. 10/2013-09/2014 Student employee, Otto von Guericke University Magdeburg, Germany.

• Tutor for mathematical/engineering courses.

### **Education**

10/2016–08/2021 Doctoral studies in applied mathematics,
 Otto von Guericke University Magdeburg, Germany.
 • summa cum laude (excellent).
 10/2014–09/2016 Master of Science in applied mathematics,
 Otto von Guericke University Magdeburg, Germany.
 • very good with distinction.
 10/2011–09/2014 Bachelor of Science in applied mathematics,
 Otto von Guericke University Magdeburg, Germany.
 • very good with distinction.

## **Research Interests**

scientific computing, scientific machine learning, model order reduction, data-driven modeling, numerical linear algebra, optimization and control, mathematical software

#### **Awards**

03/2020 Best Paper Award Automatisierungstechnik
 at - Automatisierungstechnik, De Gruyter, Austria.
 06/2019 SIAM Student Chapter Certificate of Recognition
 Society for Industrial and Applied Mathematics (SIAM), Philadelphia, USA.

## **Selected Publications**

- [1] **S. W. R. Werner** and B. Peherstorfer. Context-aware controller inference for stabilizing dynamical systems from scarce data. *Proc. R. Soc. A: Math. Phys. Eng. Sci.*, 429(2270):20220506, 2023. 10.1098/rspa.2022.0506
- [2] J. Saak, D. Siebelts, and **S. W. R. Werner**. A comparison of second-order model order reduction methods for an artificial fishtail. *at Automatisierungstechnik*, 67(8):648–667, 2019. 10.1515/auto-2019-0027
- [3] P. Benner, S. Gugercin, and **S. W. R. Werner**. Structure-preserving interpolation of bilinear control systems. *Adv. Comput. Math.*, 47(3):43, 2021. 10.1007/s10444-021-09863-W OPEN ACCESS
- [4] P. Benner, J. Saak, and **S. W. R. Werner**. MORLAB Model Order Reduction LABoratory (version 6.0), 2023. See also: https://www.mpi-magdeburg.mpg.de/projects/morlab. 10.5281/zenodo.7072831 License BSD 2-Clause