

Julian Blank

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EDUCATION

MICHIGAN STATE UNIVERSITY

East Lansing, MI, USA
PHD IN COMPUTER SCIENCE
08/2017 - 05/2022
GPA: 4.0

OTTO-VON-GUERICKE UNIVERSITY

Magdeburg, SA, Germany
MS IN COMPUTER SCIENCE
05/2014 - 05/2016
GPA: 1.0 (ECTS)

OTTO-VON-GUERICKE UNIVERSITY

Magdeburg, SA, Germany
BS IN BUSINESS INFORMATION SYSTEMS
10/2010 - 05/2014
GPA: 1.3 (ECTS)

SKILLS

PROGRAMMING

Python • Matlab • Java • Java EE
C/C++ • C# • R • SQL • Javascript
HTML • CSS • Bash

FRAMEWORKS

NumPy • PyTorch • Angular
Django

OTHERS

Linux • Git • SVN • \LaTeX

LANGUAGES

German (native) • English (C1)
Spanish (A1) • Latin
Ancient Greek

INTERESTS

Traveling and Hiking • Volleyball
Basketball • Board Games
Food & Cooking

LINKS

Google Scholar:// [Julian Blank](#)
Github:// [julesy89](#)
Github:// [msu-coinlab](#)
LinkedIn:// [in/julian-blank](#)
Xing:// [Julian_Blank](#)

PROFESSIONAL EXPERIENCE

Authorized to work in the United States

MICHIGAN STATE UNIVERSITY | RESEARCH ASSISTANT

08/2017 - Now, East Lansing, MI, USA
Research assistant in evolutionary multi-objective optimization (EMO) at the Computational Optimization and Innovation (COIN) Laboratory supervised by Professor Kalyanmoy Deb

FORD MOTOR COMPANY | RESEARCH ASSISTANT

08/2017 - 12/2018, East Lansing, MI, USA
Researcher under a Ford Michigan State University Alliance Project with the focus on multi-objective design optimization of cylinder head water jacket

COMPLEX GMBH & CO. KG | SOFTWARE DEVELOPER

12/2016 - 06/2017, Aschaffenburg, Bavaria, Germany
Full stack developer for an innovative large-scale business application developed with Java Enterprise Edition

Q-FIN GMBH | SOFTWARE DEVELOPER - INTERN

11/2013 - 03/2014, Magdeburg, SA, Germany
Software developer for a financial consulting software which automates regression testing for software migration

SAP UNIVERSITY COMPETENCE CENTER | RESEARCH ASSISTANT

06/2011 - 06/2013, Magdeburg, SA, Germany
Developing and maintaining educational material for SAP

PASS CONSULTING GROUP | TECHNICAL SUPPORT - INTERN

09/2009 - 10/2009, Aschaffenburg, BV, Germany
Onsite support for a company with around 70 employees

TEACHING EXPERIENCE

FUNDAMENTALS OF INFORMATION TECHNOLOGY

MICHIGAN STATE UNIVERSITY, GRADUATE TEACHING ASSISTANT
08/2019 - 12/2019 | East Lansing, MI, USA
Teaching assistant for the basics of Python. The responsibilities included helprooms, grading, proctoring, projects and preparation of exams.

COMPUTER ORGANIZATION AND ARCHITECTURE

MICHIGAN STATE UNIVERSITY, GRADUATE TEACHING ASSISTANT
01/2019 - 05/2019 | East Lansing, MI, USA
Teaching assistant for the theory of circuits and coding in assembly language. The responsibilities included helprooms, grading and proctoring.

DATA WAREHOUSE ARCHITECTURE

OTTO-VON-GUERICKE UNIVERSITY, GRADUATE TEACHING ASSISTANT
10/2014 - 01/2015 | Magdeburg, SA, Germany
Teaching assistant for data warehouse architecture focusing on database models, replication strategies and data analysis.

CERTIFICATES

SUMMER FELLOWSHIP

05/2019 - 08/2019

Fellowship by the Computer Science
Department of Michigan State University.

TOEFL

01/2017

Total: 109/120 points

Reading 27 • Listening 28 • Speaking 27
Writing 27

DEUTSCHLANDSTIPENDIUM

04/2014 - 04/2016

A scholarship provided by the
government of Germany to support to
high-achieving and committed students.

SCHOLARSHIP OF GERMAN ACADEMIC EXCHANGE SERVICE

08/2015 - 01/2016

Scholarship for students to gain to study
abroad experience.

SAP CERTIFIED ASSOCIATE BUSINESS FOUNDATION

03/2013

The SAP TERP10 certificate shows
knowledge of integrative business
processes, such as order-to-cash or
purchase-to-pay.

ACTIVITIES

PROGRAM COMMITTEE

SSCI'21 • GECCO'21 • EMO'21 •
CEC'21 • EMO'19 • GECCO'19

REVIEWER

IEEE Transactions on Evolutionary
Computation • IEEE Transactions on
Cybernetics • Swarm and Evolutionary
Computation • Soft Computing

COMPETITION

Competitions Organizer: Traveling Thief
Problem

MENTOR

Supervision of undergraduate research
assistants

Buddy Program: Mentoring of freshmen
transitioning into university

Buddy Program: Supporting
international students in settling down at
the Otto-von-Guericke university

SOFTWARE

PYMOO | PYTHON

pymoo.org

A framework providing state of the art single, multi and many-objective
optimization algorithms and test problems. Moreover, features related to
multi-criteria visualization and decision-making are available.

PYSAMPLING | PYTHON

A toolkit which provides methods to randomly or pseudo-randomly sample
a point-set in an N -dimensional space.

PYDACEFIT | PYTHON

A Python clone of the popular DACEfit toolbox originally developed in
MATLAB.

SMARTGROUPS | TYPESCRIPT

An application to intelligently assign individuals to a group based on each
person's personal preferences with the goal to maximize the global
satisfaction.

2048 | JAVA

A clone of the well-known 2048 game written in Java. The main focus was
to implement and evaluate several game bots in order to maximize the final
score.

ID3/C4.5 | PYTHON

Implementation of two popular decision tree algorithms which are known
to be a powerful tool to extract rules form data.

CHIMERGE | C++

An algorithm that aims to discretize a list of continuous values in a
bottom-up manner with respect to a class label.

PUBLICATIONS

Generating Well-Spaced Points on a Unit Simplex for Evolutionary Many-Objective Optimization

J. Blank, K. Deb, Y. Dhebar, S. Bandaru and H. Seada, in IEEE Transactions
on Evolutionary Computation, vol. 25, no. 1, pp. 48-60, Feb. 2021.

pymoo: Multi-Objective Optimization in Python

J. Blank and K. Deb, in IEEE Access, vol. 8, pp. 89497-89509, 2020.

Constrained Bi-objective Surrogate-Assisted Optimization of Problems with Heterogeneous Evaluation Times: Expensive Objectives and Inexpensive Constraints

J. Blank and K. Deb, in Evolutionary Multi-Criterion Optimization. EMO
2021. Lecture Notes in Computer Science, vol 12654. Springer, Cham.

PSAF: A Probabilistic Surrogate-assisted Framework for Single-objective Optimization

J. Blank and K. Deb, in Proceedings of the Genetic and Evolutionary
Computation Conference (GECCO '21).

Investigating the Normalization Procedure of NSGA-III

J. Blank and K. Deb, in Evolutionary Multi-Criterion Optimization. EMO
2019. Lecture Notes in Computer Science, vol 11411. Springer, Cham.

For a complete list of publications please have a look here.