

KEVIN INNEREBNER BSC.



Data Science | Machine Learning | Compilers | Software Technology

CONTACT

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🏠 <https://kev-inn.github.io>
🌀 @kev-inn
in Kevin Innerebner

EDUCATION

🎓 **MSc. Computer Science**
📅 09/2021 - ongoing
📍 Graz University of Technology, Graz

🎓 **Erasmus+ Student Exchange**
📅 01/2022 - 05/2022
📍 University of Jyväskylä, Jyväskylä
Finland

🎓 **BSc. Computer Science**
📅 09/2018 - 10/2021
📍 Graz University of Technology, Graz

SKILLS

Programming Languages

C, Python, Java, C#
C++, R, SQL, Javascript
Julia, Rust

Software & Tools

Git
Data handling/analysis
(e.g. numpy, scipy, pandas, ...)
Apache SPARK

Languages

German
English

HONOURS AND AWARDS

🏆 Dean's List 2022, 2020 & 2019
<https://www.tugraz.at/fakultaeten/csbme/studies/deans-list/>

🏆 CEOI 2018 - Team Austria
<https://ceoi2018.pl/teams/>

WORK HISTORY

📁 **Research Assistant**
📅 06/2022 - 07/2022
📍 Graz University of Technology
Continuation of Research Assistant position

📁 **Tutor**
📅 10/2019 - 07/2020
📍 Graz University of Technology
Teaching students **C** and **C++**.

📁 **Research Assistant**
📅 07/2019 - 12/2021
📍 Graz University of Technology
Work on various research projects. See [Projects](#).

PROJECTS

</> **DAPHONE**
📅 11/2020 - 07/2022
📍 Graz University of Technology, Graz
🌐 <https://daphne-eu.eu>
📦 w/ MLIR, LLVM, C++, SIMD, ANTLR4

- MLIR-based compiler for **Data Analysis** and **Machine Learning** pipelines.
- EU-funded project with **13** members.
- Prototype and experimental feasibility study as **BSc. thesis**.
- <https://github.com/daphne-eu/daphne>
- See [Publications](#).

</> **ExDRa**
📅 07/2019 - 07/2022
📍 Graz University of Technology, Graz
🌐 <https://www.exdra.de/>
📦 w/ Spark, Hadoop, Java, Python

- Exploratory data science on **federated raw data**
- Shared project with **Siemens, TU Graz, DFKI** and **TU Berlin**
- See [Publications](#).

</> **SystemDS**
📅 07/2019 - 07/2022
📍 Graz University of Technology, Graz
🌐 <https://systemds.apache.org/>
📦 w/ Spark, Hadoop, Java, Python

- **ML system** for the end-to-end data science Lifecycle.
- Worked on various components (Federation, Tensors, Python-API, ...).
- <https://github.com/apache/systemds>
- See [Publications](#).

PUBLICATIONS


Federated Data Preparation, Learning, and Debugging in Apache SystemDS

 S. Baunsgaard, M. Boehm, **K. Innerebner**, M. Kehayov, F. Lackner, O. Ovcharenko, A. Phani, T. Rieger, D. Weissteiner, S. B. Wrede

 2022  CIKM 2022

 [ACM DL](#)


DAPHNE: An Open and Extensible System Infrastructure for Integrated Data Analysis Pipelines

 P. Damme, M. Birkenbach, C. Bitsakos, M. Boehm, P. Bonnet, F. Ciorba, M. Dokter, P. Dowgiallo, A. Eleliemy, C. Faerber, G. Goumas, D. Habich, N. Hedam, M. Hofer, W. Huang, **K. Innerebner**, V. Karakostas, R. Kern, T. Kosar, A. Krause, D. Krems, A. Laber, W. Lehner, E. Mier, M. Paradies, B. Peischl, G. Poerwawinata, S. Psomadakis, T. Rabi, P. Ratuszniak, P. Silva, N. Skuppin, A. Starzacher, B. Steinwender, I. Tolovski, P. Tözün, W. Ulatowski, Y. Wang, I. Wrosz, A. Zamuda, C. Zhang, X. X. Zhu

 2022  CIDR 2022

 [PDF](#)


ExDRa: Exploratory Data Science on Federated Raw Data

 S. Baunsgaard, M. Boehm, A. Chaudhary, B. Derakhshan, S. Geißelsöder, P. Marian Grulich, M. Hildebrand, **K. Innerebner**, V. Markl, C. Neubauer, S. Osterburg, O. Ovcharenko, S. Redyuk, T. Rieger, A. R. Mahdiraji, S. B. Wrede, S. Zeuch

 2021  SIGMOD 2021

 [ACM DL](#)

SystemDS: A Declarative Machine Learning System for the End-to-End Data Science Lifecycle

 M. Boehm, I. Antonov, S. Baunsgaard, M. Dokter, R. Ginthör, **K. Innerebner**, F. Klezin, S. Lindstaedt, A. Phani, B. Rath, B. Reinwald, S. Siddiqi, S. B. Wrede

 2020  CIDR 2020

 [arXiv](#)