

JOHAN VON FORSTNER

AI R&D ENGINEER



EXPERIENCE

PARADOX CAT GmbH

Munich, Germany

AI R&D Architect

06/2024–present

Principal AI R&D Engineer

07/2022–06/2024

Senior AI R&D Engineer

03/2021–06/2022

Leading development of prototypes for new in-cabin sensing and natural interaction features for our customer **BMW** in their **BETA labs** R&D lab, using computer vision and radar sensors. This involves evaluating capabilities of existing hardware in the car as well as novel sensor technologies for in-cabin use-cases. We collect our own datasets, implement signal processing algorithms and deep learning models, and integrate them into demo applications running on embedded platforms.

University of Kiel

Kiel, Germany

Research Associate

10/2018–02/2021

Student Research Assistant

08/2016–03/2018

Studied the interaction of solar eruptions with cosmic rays using data from many space missions. **Lead instrument scientist** for the *High Energy Telescope* on ESA's *Solar Orbiter* and part of the scientific team for *Mars Science Laboratory* and *Chang'E 4*. Experience in data processing, analysis and visualization tools using the **Python Data Science** stack as well as **teaching** (Experimental Physics lab course).

24 peer-reviewed publications (4 as first author).

rami.io Software Development

remote, part time

Software Developer

08/2014–02/2021

- Project lead & full stack dev for **Vertretungsplan.app**, an Android & iOS app for >60k students and teachers at >300 high schools to receive notifications about schedule changes
- Android developer for **Web Opac App**, an app to access user account and catalog search in more than 1,000 public libraries
- Full stack developer for the **pretix** event ticketing system

PERSONAL PROJECTS

EVMap

Open source Android app to find electric vehicle chargers

CONTACT

johan@vonforst.net

LANGUAGES


German (native)


English (fluent)


French (basic)

SKILLS

Python, Kotlin, Java
NumPy, pandas, matplotlib
PyTorch, fast.ai, OpenCV
Cameras, Radar sensors
Android development

 johan12345

 Johan von Forstner

 johan.vonforst.net

EDUCATION

PhD in Space Physics

2021, University of Kiel

final mark: *summa cum laude*

Thesis subject: "Multipoint observations of ICMEs in the inner heliosphere – Forbush decreases and remote sensing"

M.Sc. in Physics

2018, University of Kiel

final mark: 1.4 (very good)

Thesis subject: "Tracking and validating ICMEs propagating towards Mars using STEREO Heliospheric Imagers combined with Forbush decreases detected by MSL/RAD"

B.Sc. in Physics

2016, University of Kiel

final mark: 1.7 (good)

Thesis subject: "Multi-spacecraft observations of ICMEs propagating from 1 AU to 1.5 AU during the 2014 Earth-Mars conjunction".

AWARDS

Faculty Prize

05/2022

Awarded by Kiel University's Faculty of Mathematics and Natural Sciences for one of the two best PhD theses in 2021.

Lindau Nobel Laureate Meeting

06/2021

Qualified in a global competition among young scientists worldwide to participate in the 70th Lindau Nobel Laureate Meeting (Online).

Outstanding Student Presentation Award

02/2021

Awarded to top 2-5% of students presenting their research at the American Geophysical Union's 2020 Fall Meeting.

CERTIFICATES

Self-Driving Car Engineer Nanodegree

04/2022

Udacity

VOLUNTEERING

Junger Kammerchor Lucente e.V.

05/2023–present

Board member of chamber choir