

# Jonas Schäfer

 Birmingham - United Kingdom  
  +44 7542 546497  
 jonas.schaefer00@gmail.com  
 jonas-schaefer  
 j0ner0n  
 joneron

## SKILLS

### PROGRAMMING LANGUAGES

Competent: Python • Java

Familiar: Kotlin • TS • Haskell • C • Zsh

### MARKUP & STYLING

LaTeX • Markdown • HTML • (S)CSS


### TECHNOLOGIES AND TOOLS

Git • Sklearn & PyTorch • Firebase •  
Angular • Hugo • Agile • UML • TDD •  
Linux • macOS

### LANGUAGES

- German (native - C2)
- English (fluent - C1/C2)
- French (advanced - B1)

### INTERESTS

Science videos, listening to music and playing the guitar & piano , travelling, photography, learning languages

## EDUCATION

### UNIVERSITY OF BIRMINGHAM

BSc Computer Science (Hons)

09/2018 – 06/2021 | Birmingham, UK

- Predicted degree: 1<sup>st</sup> Honours
- Student Representative for 2<sup>nd</sup> Year Computer Science courses
- Prominent topics covered include:
  - Machine Learning
  - Mathematical Modelling
  - Computer Vision & Robotics
  - Software Engineering
  - Mathematics & Logic
  - Data Structures & Algorithms
  - Networks & Security

### WARNDTGYMNASIUM

Abitur | Overall 1.5




07/2018 | Geislautern, Germany

- Examination subjects:  
English (14), Mathematics (13),  
German (13), Informatics (12),  
Geography (10)
- Honor received for school's best final Informatics exam

## WORK EXPERIENCE

### ROYAL SOCIETY INDUSTRY SUMMER STUDENTSHIP | University of Birmingham, School of Biosciences

07/2020 – 09/2020 | Full-time Studentship | Remote

- This research was funded by The Royal Society  and supervised by Dr. Jackie Chappell , Senior Lecturer in Animal Behaviour.
- I iteratively designed a **Deep Neural Network**-based system to monitor behaviour of captive animals via CCTV-applied **pose estimation**.
- My work was presented and praised by academics at The Royal Society.
- Within 10 weeks, I **independently** aquired fundamental **Computer Vision** knowledge required for this opportunity. I **worked with real data** to design a monitoring system which is now being further researched .

### WEB DEVELOPER & GERMAN PARTNERSHIP LEAD | Climate Science

12/2019 – Present | Part-time (voluntary) | Remote

- I coordinate development with the CTO and implement and maintain the organisation's **web app** in a dynamic technical team of 4-8 members.
- I lead the coordination and negotiation of partnerships and funding with private companies & regional and national ministries in Germany.
- Our web platform currently reaches about **18,000 monthly users** (February 2021) with an **increase in users of 57%** to the previous month.
- I continuously devote time to **combat Climate Change misinformation**, aquire web technology expertise and deploy customer-facing products.

### IT SYSTEM ADMINISTRATOR | ProWIN Winter GmbH


07/2019 (3 weeks) | Full-time Internship | Illingen, Germany

- I improved the company's **operating efficiency** by automating order confirmations across departments and improved password policies for employees to **enhance network security**.

## PROJECT EXPERIENCE



### CARDIAC MRI - SEMANTIC IMAGE SEGMENTATION

11/2020 – 12/2020 | University coursework - Neural Computation

- Our team was tasked with performing image segmentation on a **real CMRI dataset** and writing a scientific report on our approach and result.
- We implemented and trained a custom **UNet architecture in PyTorch** to achieve a **89% DICE-score** on the coursework Kaggle competition .
- I co-lead my team of 5 members to a **91% grade**, displaying leadership & team managment skills, methodical thinking and academic rigor.

### GRAVITY SIMULATION IN JAVA

11/2019 | Private Software Project

- Simulator  of gravitational forces in 3D space capable of performing complex **n-body simulations**  with logging output, collision detection,...
- I display my ability to design software and produce **clean, easily extendable and well-documented code** for complex private projects.