# JONAS EMILIO PETERSEN

je77petersen@gmail.com

+49 1575 2575024

27 Mile End Road London, E14TP <u>GitHub</u> <u>LinkedIn</u>

**Computational engineer** (Cambridge MPhil, Imperial MEng) with AI/robotics expertise, published research, AI startup experience: co-founded and scaled to €500k revenue in <12 months (LLMs). Ex-BCG; available: 10/25

#### **SKILLS & INTERESTS**

AI & Robotics: Python, C (embedded systems), data pipelines, RL, LLMs/SLMs, ROS, PyTorch, OpenCV

Miscellaneous: German (native), English, tennis, chess, jazz, robotics (SO-101, human2robot)

**EDUCATION** 

**University of Cambridge** 

Cambridge, UK

MPhil, Nanotechnology - Distinction (highest honors)

Sep 2022 – Jul 2023

**Imperial College London** 

London, UK

MEng, Mechanical Engineering - Distinction, Dean's List (top 10% of the cohort)

Sep 2018 – Jul 2022

• Robotics, ML, Advanced Computing & Mechatronics, Statistics, Embedded C for Microcontrollers

• Computational thesis on wildfire-suppression using Monte Carlo Tree Search: published <u>first-author paper</u>

## Sachsenwaldschule Gymnasium Reinbek

Hamburg, Germany

German general matriculation standard (Abitur)

Sep 2009 - Jul 2017

• Valedictorian: 1.0 (96.33%); all 3 subject awards for best student of the year (Maths, Chemistry & Physics)

#### WORK EXPERIENCE

Media Press Group

London, UK

CEO UK (previously: Process Automation Engineer)

Sep 2023 – Present

• Launched UK, scaled to 6 people. Python + N8N for sales automations, productised AI with group CTO

K2 AI London, UK

Co-founder

Sep 2023 - Dec 2024

- Grew to 10 employees (Sales & Tech), 3 hackathons, 3 AI-driven automation projects, >500kEUR revenue
- Conceptualised 4 AI-powered products, receiving positive feedback from 30+ CFOs (100+ employees)
- Developed a task mining SaaS MVP using SLMs; reintegrated part of the team into parent organization

**Boston Consulting Group** 

Munich, Germany

Visiting Associate (built a PowerBI costs forecasting tool; received full-time offer)

Jun – Aug 2021 Hamburg, Germany

R&D Intern (Python firmware unit tests & object detection with OpenCV)

rg, Germany Aug 2017

R&D Intern (1 yinon jirmware ana tesis & object detection with OpenCr)

RESEARCH EXPERIENCE

# Modelling and optimization of extinguishing actions for wildfire suppression

London, UK

Master Thesis, Imperial College (First Class Honors)

Oct 2021 – Jul 2022

- Developed an MDP wildfire model using stochastic fire particles; included water mist & firebreaks
- Optimised wildfire suppression with Monte-Carlo Tree Search (MCTS); verified against real wildfires
- First-author paper published in the prestigious journal Combustion Science & Technology (2023)

#### **Embedded C with Microcontrollers**

London, UK

ECM, Imperial College (First Class Honors)

Oct – Dec 2021

- Programmed in C on a PIC18: real-time control for an automatic outside light (incl. daylight saving time)
- Built a color-detecting, smart steering electric toy car in a team of two; won the cohort competition

### Biomechanical rehabilitation exoskeleton (arm) for Long-COVID patients

London, UK

Design, Make & Test, group project, Imperial College (First Class Honors)

Oct 2020 – Jun 2021

- Built a gravity-compensating shoulder exoskeleton, PM for group of 5; PID control (4 sensor inputs)
- Worked with an Arduino Mega + amplifier for encoder & strain gauge inputs; conducted user testing

## **PROJECTS**

#### Lattice - Coordination and Data Layer for the Robotic Age

London, UK

Co-founder (Website and GitHub repo)

Apr 2025 – present

- Training data platform/factory: imitation learning from human hand video recordings, not teleoperation
- Currently: chess board + Hugging Face SO-101 experiments, Isaac Gym simulations, ROS, synthetic data
- Won 2 hackathons in Munich (ExVo) and London (>200 participants) & secured YC interview