

# GUILHERME ILUNGA

ML APPLIED SCIENTIST / ENGINEER

## CONTACT

 [linkedin.com/in/gilunga/](https://www.linkedin.com/in/gilunga/)  
 [gilunga117@gmail.com](mailto:gilunga117@gmail.com)  
 [github.com/GIlunga/](https://github.com/GIlunga/)  
 [gilunga.github.io](https://gilunga.github.io)

## PROFILE SUMMARY

ML applied scientist with over 7 years of experience at Bumble, Amazon, and Microsoft Research. Experienced in building ML projects at massive scale and for novel, unsolved research projects. Interested in hard problems, particularly in RecSys, RL, LLMs, and large-scale training infrastructure.

## EDUCATION

2013-2019

University of Lisbon

- Bachelor and Master in computer science
- Master thesis on model-based optimization for architecture

## SELECTED PUBS.

- [Inside the predictive AI model that powers Amazon DSP Performance+ & Brand+](#)
- [Holographic Storage for the Cloud: advances and challenges](#)
- [Derivative-free Methods for Structural Optimization](#)

## PROJECTS

- [ML blog](#)
- Simple RL for LLMs (WIP)

## SKILLS

- Python, Java, SQL, Pytorch, Spark
- Recommender systems
- Text generation, image segmentation
- English and Portuguese

## WORK EXPERIENCE

Bumble

Jun 2025 - Present

Senior ML Scientist

- Leading development of a >10M user end-to-end reciprocal recommender system

Amazon

May 2021 - Jun 2025

Applied Scientist I → II

- Led several ML projects in digital advertising from ideation to full release, delivering over \$400M in annual revenue
- Developed recommender systems for webpage contextual category, user interest, and purchase prediction at global Amazon scale
- Developed a sequence-based foundation model to predict user views, purchases, and other actions
- Worked as an applied science manager for 6 months, leading two high-impact projects with revenue exceeding \$200M and managing a team of 4 scientists

Microsoft Research

Sep 2018 - May 2021

AI Resident → Research Software Engineer II

- Developed decoding vision models for a novel research project on holographic storage devices
- Contributed to multiple CV initiatives, including 3D medical image segmentation, hand gesture classification from video, and 3D mesh generation using GANs
- Contributed to multiple NLP initiatives, including Transformer-based code completion and multimedia-aware smart replies
- Provided technical mentorship to AI Residents and interns across multiple ML domains