

# Oren Sultan, Research Scientist Intern at Meta (FAIR), CS PhD Candidate

+972-522795269 | orensultan.com | orens2806@gmail.com | linkedin.com/in/oren-sultan-93039146 | x.com/oren\_sultan

## 1 Education

- **Feb 2023 - Dec 2026:** PhD Candidate (**direct track for excellent students**) in Computer Science at The Hebrew University, Israel. Advisor: Prof. Dafna Shahaf. **In progress.**
- **Oct 2020 - Dec 2022:** M.Sc in Computer Science, The Hebrew University, Israel. Advisor: Prof. Dafna Shahaf. **GPA: 96.5/100.** Two long papers were accepted to the main conference of EMNLP 2022. Selected to deliver graduation speech.
  - **May 2022 - Sep 2022:** M.Sc Erasmus+ Exchange Program & Scholarship, The Technical University of Munich.
- **Oct 2015 - Mar 2019:** B.Sc in Computer Science, The Hebrew University, Israel. **GPA: 90.21/100, Magna Cum Laude.**
  - **Feb 2018 - Jun 2018:** Exchange Program & Scholarship, The University of Melbourne.
  - **2017 - 2019:** Studied towards MBA in Big Data – an **excellence program for outstanding B.Sc students** (B.Sc & MBA in only 4 years). Completed the 8 mandatory courses, **GPA: 96.16/100.**

## 2 Honors & Awards, Scholarships & Fellowships

- **2024 - present:** Fellowship for outstanding PhD candidates in AI and Data Science, The Planning & Budgeting Committee (PBC) of Council For Higher Education (CHE), Israel.
- **2022 - present:** MSc & PhD Scholarship – Dafna Shahaf Hyadata-Lab, The Hebrew University, Israel.
- **2022:** Erasmus+ Scholarship for honors students, Technical University of Munich, Germany.
- **2019:** B.Sc in Computer Science – **Magna Cum Laude**, The Hebrew University of Jerusalem, Israel.
- **2018:** Scholarship for honors students, The University of Melbourne, Australia.
- **2013:** Annual Excellence Tech Project Award, The Israeli Intelligence Corps, Commander of Unit 8200 (rank: Tat Aluf).
- **2012:** Annual Excellence Team Award, The Israeli Intelligence Corps, Commander of R&D, Unit 8200 (rank: Aluf Mishne).

## 3 Publications

- **2026:** LLMs versus the Halting Problem: Revisiting Program Termination Prediction
  - **Oren Sultan**, Jordi Armengol-Estape, Pascal Kesseli, Julien Vanegue, Dafna Shahaf, Yossi Adi, Peter O’Hearn. In review (ARR).
- **2025:** CWM: An Open-Weights LLM for Research on Code Generation with World Models
  - Meta FAIR CodeGen, **Oren Sultan**. Technical report.
- **2025:** Towards Reliable Proof Generation with LLMs: A Neuro-Symbolic Approach
  - **Oren Sultan**, Eitan Stern, Dafna Shahaf. Under review, score: **accept to findings of ACL 2026**, ISCOL 2025.
- **2024:** Visual Editing with LLM-based Tool Chaining: An Efficient Distillation Approach for Real-Time Applications
  - **Oren Sultan**, Alex Khasin, Guy Shiran, Asnat Greenstein-Messica, Dafna Shahaf. **EMNLP 2024.**
- **2024:** ParallelPARC: A Scalable Pipeline for Generating Natural-Language Analogies
  - **Oren Sultan**, Yonatan Bitton, Ron Yosef, Dafna Shahaf. **NAACL 2024**, ISCOL 2024.

- **2022:** Life is a Circus and We are the Clowns: Automatically Finding Analogies between Situations and Processes  
– **Oren Sultan**, Dafna Shahaf. **EMNLP 2022**.
- **2022:** Breakpoint Transformers for Modeling and Tracking Intermediate Beliefs  
– Kyle Richardson, Ronen Tamari, **Oren Sultan**, Reut Tsarfaty, Dafna Shahaf, Ashish Sabharwal. **EMNLP 2022**.

## 4 Professional Experience

- **Jul 2025 - :** Research Scientist Intern @ Meta Fundamental AI Research (FAIR). **Advisor:** Prof. Yossi Adi.
- **Mar 2024 - Jun 2025:** AI Researcher (Part-time Student Position) @ Lightricks. **Advisor:** Dr. Asi Messica.
- **Oct 2023 - Dec 2023:** Co-founded and led speical forces of researchers and data scientists in the fields of NLP & IR, Unit 8200 (Captain in reserves). **Advisor:** Prof. Oren Kurland.
- **Aug 2023 - Feb 2024:** AI Researcher (Full-time Summer Intern) @ Lightricks. **Advisor:** Dr. Asi Messica.
- **Mar 2023 - Apr 2023:** AI / NLP Visiting Researcher. **Hosts:** Prof. Frank Guerin (The University of Surrey), Prof. Chenghua Lin (The University of Sheffield).
- **May 2022 - Jul 2022:** NLP Researcher, The Technical University of Munich – Social Computing Lab (Prof. Georg Groh).
- **Oct 2021 - Present:** AI / NLP Researcher, The Hebrew University, Israel. **Advisor:** Prof. Dafna Shahaf.
- **Aug 2019 - Sep 2020:** Backend Software Engineer (Search), Algorithms group, Fiverr.
- **Nov 2016 - Dec 2017:** Data Engineer Consultant, Madeira Data Solutions.
- **Jun 2014 - Oct 2015:** Data Engineer, MyThings.
- **2008 - 2013:** MSSQL Data Engineer, Data Engineering Founder & Team Leader – R&D, Unit 8200.

## 5 Invited Talks

- **Apr 2025:** “Visual Editing with LLM-based Tool Chaining”, Nvidia & NLP IL Meetup, Israel.
- **Sep 2024:** “Visual Editing with LLM-based Tool Chaining”, AI course, Lightricks, Israel.
- **Sep 2024:** “Fine-Tuning Large Language Models (LLMs)”, AI course, Lightricks, Israel.
- **Jun 2023:** “Finding Analogies between Situations and Processes”, MSc graduation ceremony, Hebrew University, Israel.
- **Mar 2023:** “Analogies of Situations and Processes: Detection, Explanation, Generation”, SheffieldNLP, UK.
- **Jan 2023:** “Using LLMs for Natural-Language Analogies Generation”, BIU-NLP, Bar Ilan University, Israel.
- **Jan 2023:** “Automatically Finding Analogies between Situations and Processes”, The Hebrew University, Israel.
- **Jan 2022:** “Breakpoint Transformers for Modeling and Tracking Intermediate Beliefs“, Aristo team, AI2, Seattle, USA.

## 6 Academic Activities

- **TA:** “self-paced introduction to data science” (67876) at the Center for Interdisciplinary Data-Science Research (CIDR), The Hebrew University, Israel. 2023 - present.
- **Conference Reviewer:** ACL 2024, ACL 2025, ACL 2026

## 7 Miscellaneous

- **Citizenships:** Israeli, Portuguese.
- **Languages:** Hebrew (mother tongue), English (fluent), Spanish (intermediate), German (elementary).