

hello@jackcook.com
(917) 655-8944

Jack Cook

Education

University of Oxford

Rhodes Scholar
M.Sc. Social Science of
the Internet

MIT

M.Eng. '23 + S.B. '22
Computer Science
Minor in Brain and
Cognitive Sciences

Links

jackcook.com
github.com/jackcook
linkedin.com/in/jack-cook

NLP Skills

- Finding appropriate applications for NLP
- Optimizing models for production
 - Pruning, distillation, quantization, etc.
 - TorchServe
- Pre-training and fine-tuning LLMs (mostly BERT)

Favorite LMs

- BERT / DeBERTa
- T0 / FLAN-T5
- GPT-3

Technical Skills

- Python
- Go, Redis
- JavaScript, React
- Swift, Objective-C

Work Experience

The New York Times

Senior Software Engineer, NLP Sep. 2019 – Present

- Building a tool that automatically surfaces high-level themes and insights about large textual datasets for our journalists
- Created a live reader-facing Q&A module which uses BERT to answer questions about Covid-19 in real time (Google “*Have Climate Questions? Get Answers Here*” to try one out!)
- Explain and promote NLP solutions to key newsroom stakeholders

MIT

Research Assistant / UROP Feb. 2021 – Jan. 2023

- Published M.Eng thesis about applying ML toward early detection of Alzheimer’s and other neurodegenerative diseases
- First author on “There’s Always a Bigger Fish” (ISCA ’22), a project applying machine learning to the analysis of side-channel attacks
 - Selected for IEEE Micro Top Picks, which annually highlights the top 12 research papers in computer architecture

NVIDIA

Deep Learning Research Intern Jun. 2019 – Aug. 2019

- Investigated newer and better ways to pre-train BERT from scratch
- Contributed to the development of NeMo, a popular open-source modular framework for deep learning (NeurIPS ’19)

Microsoft

Software Engineer Aug. 2016 – Mar. 2018

- Joined through the acquisition of Mixer (formerly Beam)
- Built the Mixer Create app, which allowed users to broadcast live video from their smartphones
- Maintained and updated Mixer’s primary viewing app

Beam

Lead Mobile Engineer (Founding Team) Jun. 2014 – Aug. 2016

- Designed and developed Beam’s iOS and Android apps

Activities

HackMIT

Sep. 2018 – Oct. 2020

- Directed MIT’s largest undergraduate student hackathon, where 1,000 students annually create projects over a September weekend
- Developed a 2D virtual world to bring our event online in 2020