Harry Askham | CV ☐ (+44) 7891131622 • ☑ harry@skh.am • ☑ a.skh.am ☐ harryaskham • in harryaskham

I am a software engineer with ten years of professional experience, five of which have been focused on building and leading high-performing teams across both Google and DeepMind.

My work has spanned from widely used full-stack web applications to machine learning research published in *Nature*.

I am interested in solving the engineering challenges that arise when deploying the scientific state-of-the-art in the real world.

Education

University of London

Birkbeck College Oct 2014 – Aug 2016

MSc Cognition & Computation (Distinction)

University of Cambridge

Christ's College Oct 2008 – Jun 2011

BA (Hons.), MA (Cantab), Computer Science (2.1)

Experience

DeepMind

Staff Software Engineer, Applied

Aug 2020 – Present

o Engineering lead focused on delivering real-world applications of DeepMind AI.

Google London

Engineering Lead, Health Research UK

Jan 2019 – Aug 2020

- o Grew and led Google Health's 23-engineer research team in the UK.
- o Managed three subteams across ophthalmology, radiotherapy and medical records research.
- o Focused on the deployment of state-of-the-art machine learning models.

DeepMind London

Staff Software Engineer, Health Research

Oct 2016 - Jan 2019

- o Built and led a 12-person engineering team in Health Research.
- Designed and built the infrastructure behind several *Nature*-family publications.
- Created UXR-driven iOS prototypes for the deployment of clinical predictions.

Google London

Senior Software Engineer, AdWords & Sales

Oct 2011 - Oct 2016

- Tech lead for full-stack team of 8 engineers building high-revenue sales tools.
- Led engineering for a knowledge management system relied upon by 20,000+ Google salespeople.

Bloomberg London

Research & Development (Internship)

Jun 2010 – Sep 2010

- o Given sole control of an important, time-critical project.
- Designed and delivered a suite of network simulation and testing tools in C++.

Skills

- o Hiring, building and leading effective engineering and research teams
- o Designing and implementing complex Google-scale distributed systems
- o Building machine learning infrastructure and data engineering machinery
- Full-stack application development

Languages.....

- o Haskell, Rust, Go
- o Python (incl. TensorFlow, NumPy, SciPy, etc)
- o JavaScript, PureScript & experience with modern web development
- Less recent professional experience in both C++ and Java

Publications

Tomašev, Nenad, Natalie Harris, Sebastien Baur, Anne Mottram, Xavier Glorot, Jack W. Rae, Michal Zielinski, **Harry Askham** et al. "Use of deep learning to develop continuous-risk models for adverse event prediction from electronic health records." **Nature Protocols** (2021): 1-23.

Yim, Jason, Reena Chopra, Terry Spitz, Jim Winkens, Annette Obika, Christopher Kelly, **Harry Askham** et al. "Predicting conversion to wet age-related macular degeneration using deep learning." **Nature Medicine** (2020): 1-8.

Tomašev, Nenad, Xavier Glorot, Jack W. Rae, Michal Zielinski, **Harry Askham**, Andre Saraiva, Anne Mottram et al. "A clinically applicable approach to continuous prediction of future acute kidney injury." **Nature** 572, no. 7767 (2019): 116-119.

De Fauw, Jeffrey, Joseph R. Ledsam, Bernardino Romera-Paredes, Stanislav Nikolov, Nenad Tomasev, Sam Blackwell, **Harry Askham** et al. "Clinically applicable deep learning for diagnosis and referral in retinal disease." **Nature Medicine** 24, no. 9 (2018): 1342-1350.

Nikolov, Stanislav, Sam Blackwell, Ruheena Mendes, Jeffrey De Fauw, Clemens Meyer, Cían Hughes, **Harry Askham** et al. "Deep learning to achieve clinically applicable segmentation of head and neck anatomy for radiotherapy." arXiv preprint arXiv:1809.04430 (2018).

Wagner, Siegfried Karl, Reena Chopra, Joseph R. Ledsam, **Harry Askham**, Sam Blackwell, Livia Faes, Konstantinos Balaskas, Trevor Back, and Pearse Andrew Keane. "Diagnostic accuracy and interobserver variability of macular disease evaluation using optical coherence tomography." Investigative Ophthalmology & Visual Science 60, no. 9 (2019): 1849-1849.

Quercia, Daniele, **Harry Askham**, and Jon Crowcroft. "TweetLDA: supervised topic classification and link prediction in Twitter." In Proceedings of the 4th Annual ACM Web Science Conference, pp. 247-250. 2012.