

## Letter of Reference

Mr Philipp Hager was employed in our company from 1 August 2020 to 15 December 2021 in the Finance & Operations department as a Data Scientist. Beyond aforementioned position, he was employed at Blinkist as:

- Student Trainee Business Intelligence from 5 August 2019 to 30 June 2020
- Student Trainee Software Development Android from 17 April 2017 to 15 September 2018
- Student Trainee Software Development Android from 01 April 2016 to 31 July 2016
- Intern Software Development from 28 September 2015 to 12 February 2016

Blinks Labs GmbH, founded in Berlin in 2012, is a fast-growing, international company developing new mobile microlearning formats. The core product, Blinkist, is an app featuring explainers of the key takeaways from the world's best nonfiction books and podcasts that can be read or listened to in around 15 minutes. Fast-forward to 2021 and the company now has more than 160 employees, over 18 million users globally, and an in-app library of over 4,500 titles. It's also produced award-nominated podcast Simplify, won awards in audio design and advertising, and is fostering a growing stream of innovative original content.

Mr Hager's main area of responsibility included:

- Building over twenty in-house recommender systems that provide content to over 15M users, such as:
  - Content-based recommender systems for audio and textual content using multilingual transformer models in Tensorflow
  - Modern collaborative filtering methods such as shallow auto encoder models for social recommendations
- Implementing machine learning production systems including data pipelines, model serving, and monitoring for:
  - Revenue prediction
  - · Classifying customer feedback
  - Multi-touch marketing attribution
- Acting as lead architect of a platform for real-time recommender systems
  - Designing a data layer that serves user data to our recommender systems directly from the app with less than a second of delay
  - Building a custom model training and deployment infrastructure using Amazon SageMaker and Serverless that auto-scales to user demand
  - Adding end-to-end metrics, monitoring, and alarms to the project



- Working closely with our CRM team on:
  - Adding personalized recommendations to our messaging
  - A system that selects the next best type of message for a given user
- Revamping the data infrastructure and analytics for the NPS survey to link qualitative and quantitative feedback to different customer segments
- Publishing and presenting multiple exploratory analyses to help understand customer behavior:
  - Building an interactive tool to segment customers based on behavior
  - · Investigating time-dependent changes in app usage
  - Exploring differences in app usage between iOS and Android customers
- Coaching colleagues in reviews, learning sessions and workshops on advanced Python, Data Visualization, and Machine Learning topics

Mr Hager impressed us with his comprehensive, wide-ranging and in-depth specialist knowledge, which he was always able to apply confidently and in a target-oriented manner in practice. Characteristic for his extraordinary performance at Blinkist were:

- Outstanding level of academic ambition in a business environment, including the ability to quickly translate state of the art academia into valuable data products for our company
- Absolute team player mindset: He was always able to elevate the team's outcomes by his willingness to support and add his skillset to any project
- Quick to deploy: Mr Hager's broad tech skill set and outcome-oriented mindset allowed him to deliver useable data products with not-seen-before timelines

Mr Hager always worked using his own initiative and completely identified with his responsibilities and our company at all times. He always displayed an impressive level of dedication and motivation, and demonstrated resilience even in highly stressful situations. He was always able to find excellent solutions for any problems which arose.

The fact that Blinkist can now recommend content in real time at scale is one of the biggest successes both for Philipp and Blinkist in 2021.

It is also worth highlighting that Mr Hager has modernized the architecture behind our recommender systems, which allows us to deploy new algorithms in much shorter time spans and monitor their performance more proactively across the full tech stack. His performance always earned our full recognition in every respect.

With his always engaging and extremely helpful manner, Mr Hager was particularly appreciated by his line managers and colleagues. His behavior was exemplary at all times.



Mr Hager is leaving our company at his request on 15 December 2021. We sincerely regret his departure, as we will be losing a very capable employee. We would like to thank him for his consistently excellent performance and wish him all the best and every success in his future professional career and private life.

Berlin, 15 December 2021

Blinks Labs GmbH

Sascha Urban

Director of Data Analytics and Business Intelligence