

# Peter Goldsborough

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## EXPERIENCE

- **Facebook**

Software Engineer, Stream Processing (Data Warehouse) *Seattle, USA* | 02/2019 –

- Developing distributed stream processing systems for realtime analytics and ML features,
- Leading team of 11 on a transactional stream processing product for realtime data warehouse ingestion.

Software Engineer, PyTorch (Facebook AI Research) *Menlo Park, USA* | 11/2017 – 02/2019

- Worked on the core PyTorch deep learning framework team,
- Lead development of PyTorch C++ APIs for training and inference.

- **Broad Institute of MIT and Harvard**

Research Intern, Imaging Group *Cambridge, USA* | 08/2017 – 11/2017

- Research on Generative Adversarial Networks for representation learning of microscopic cell images,
- Poster at workshop on Machine Learning in Computational Biology at NIPS 2017.

- **Facebook**

Software Engineering Intern, Scribe (Realtime Data) *London, United Kingdom* | 05/2017 – 08/2017

- Optimized a highly distributed realtime logging framework at the core of Facebook infrastructure,
- Invited to dinner with Mark Zuckerberg as one of 13 interns (out of several thousand).

- **Bloomberg**

Software Engineering Intern, Instant Bloomberg *London, United Kingdom* | 11/2016 – 04/2017

- Extended the Instant Bloomberg (IB) messaging system to trace message paths through datacenters,
- Wrote a network traffic simulation tool to produce messages to Apache Kafka message queue clusters.

- **Google**

Software Engineering Intern, gTech *London, United Kingdom* | 08/2016 – 11/2016

- Built chatbots in Go, using the natural language processing engine inside Google's Allo app,
- Open-sourced an AngularJS integration of Google's GPT library in an official Google GitHub organization.

## PROJECTS

- Years of libraries, tools, tutorials and moonshots on [github.com/goldsborough](https://github.com/goldsborough) and [www.goldsborough.me](http://www.goldsborough.me)
- clang-expand is a clang and LLVM based tool to inline function calls and expand macros in C, C++ and Objective-C for visual benefit and easier refactoring. Featured in [LLVM Weekly 169](#).
- Conference talks on [Engineering Challenges of Deep Learning](#), [Deep Learning with TensorFlow](#), [C++ Tooling with clang and LLVM](#) and more – you can YouTube my name.

## EDUCATION

- **Technical University Munich (TUM)**

Computer Science *Munich, Germany* | 2015 – 2016

- 1.2 grade average (1 is best, 6 worst), top 5% in all courses,
- German national scholarship (1% acceptance rate), Max Weber scholarship (nominated by TUM).

## PUBLICATIONS

- *CytoGAN: Generative Modeling of Cell Images*, **Goldsborough**, Pawlowski, Singh, Caicedo, Carpenter (2017)
- *A Tour of TensorFlow*, **Goldsborough** (2016) – [arXiv:1610.01178](https://arxiv.org/abs/1610.01178)
- *Non-Intrusive Load Monitoring: A Review and Outlook*, Klemenjak, **Goldsborough** (2016) – [arXiv:1610.01191](https://arxiv.org/abs/1610.01191)