(401) 499-9396 Providence, RI lachiekermode@gmail.com

# Lachlan Kermode

Cloud engineer

Portfolio: MathtoData.com github.com/breezykermo linkedin.com/in/lachlankermode

Originally from New Zealand, my current work is in the domain of cloud engineering with a focus on building streaming systems that process real-time data. I have previously worked as a machine learning research engineer, a full stack developer, and a mobile developer. I run with first-class support for Arch linux, though I have worked at length also with MacOS. In my spare time, I swim, sing and tinker with hardware. See my website for some of my hobby writing and open source/academic work, and my portfolio for my musical and artistic experience.

### **SKILLS**

Languages Node/JS, Rust, Python, Java, C/C++

Platforms AWS, Docker, GCP, Flink, Kubernetes, PyTorch, React, VueJS 3D and Design Blender, Maya, Unity, Figma, After Effects, Premiere Pro

**Communication** English, Italian (fluent), Latin (some).

## **TECHNICAL EXPERIENCE**

Forensic Architecture

Senior Software Engineer Feb 2022 — Sep 2022

Halter Auckland, New Zealand

- Specialising as a machine learning engineer, architected and built a feature store to compute real-time uplinks from IoT devices using Kinesis streams and Apache Flink on AWS.
- Contributed to microservices in Java, Node and Python (SNS/SQS, DynamoDB, and PostgresQL)
- · Built, configured and monitored cloud infrastructure with Terraform, Concourse CI, Grafana, and AWS.

# Advanced Researcher / Software Lead

Jul 2018 — Jan 2021

London, UK

- Full stack engineering in React, Vue, Python and Golang for various full stack platforms.
- Developed machine learning workflow to train computer vision classifiers on synthetic data generated in Unity, and then to deploy on public domain media from Youtube and Twitter.
- Written and maintained devops CI/CD infrastructure in Ansible and Terraform for several live platforms.
- First author of paper at NeurIPS 2019 on the use of synthetic data in computer vision, as well as co-author of follow-up paper at WACV 2022.

CTO and co-founder

DirectDrinks

Aug 2016 — Mar 2017

Wellington, New Zealand

• Bootstrapped an end-to-end stack across web, mobile and tablet for a startup that provides a direct sales channels between large corporate suppliers and small resellers in the FMCG industry, disrupting a pipeline that is currently dominated by mid-tier redistributors.

## Full stack and mobile freelancing

Jun 2016 — present

various

- Designed and developed MLOPs workflow in GCP for deploying inference capability at SMAT.
- Co-designed and developed website at The Syllabus.
- Developed Python libraries to simplify data engineering workflows from Jupyter at Merantix Labs.
- Developed an Objective C SDK for an OAuth2 verification flow and prototyped two React Native applications for Inflection.

# **EDUCATION**

Masters in Computer Science, Brown University	exp. 2023
PhD in Modern Culture and Media, Brown University	exp. 2026
A.B. in Computer Science, Princeton University	2013 — 2018

#### **ACTIVITIES**

I coordinate and run a reading group on technology and society called A.R.G.	2019 — present
I have several years experience giving workshops and teaching, more details in my academic CV.	2019 — present
Exhibitions at Whitney (NY), De Young Museum (SF), Tate Britain (London), and others.	2018 — present
I have been involved in various musical and theatre projects, more details available in my portfolio.	2013 — present
1st place at Burda Hackday Munich	2016
HackZurich, Dropbox API Prize and Top 25	2015