Lachlan Kermode

WHEN AND WHERE I WAS BORN:	17 November 1994, Wellington, New Zealand
LANGUAGES I UNDERSTAND:	English (mothertongue), Italian (proficient), Latin
PERSONAL WEBSITE:	lachlankermode.com
PROFESSIONAL RESUME:	resume.lachlankermode.com
MUSIC AND SPORT PORTFOLIO:	portfolio.lachlankermode.com
EMAIL:	lachie@ohrg.org

EDUCATION

09.2021–   Doctoral candidate in the department of MODERN CULTURE AND MEDIA, **Brown University**.

05.2018   AB in COMPUTER SCIENCE, **Princeton University**.
Coursework includes 5+ upper level seminars in critical theory, media theory and performance theory.
Thesis: "Towards critical computing: a template for animated documentary," Advised: Arvind NARAYANAN

PUBLICATIONS

01.2021   Detecting Tear Gas Canisters With Limited Training Data. (Contributing author.)
WACV 2022, Main Conference, Object Detection and Recognition.

11.2019   Objects of violence: synthetic data for practical ML in human rights investigations. (First author.)
NEURIPS 2019, AI for Social Good Workshop, Producing Good Outcomes.
https://arxiv.org/abs/2004.01030

OPEN SOURCE SOFTWARE | CODE

Github profile: https://github.com/breezykermo, Gitlab profile: https://gitlab.com/breezykermo.

Timemap	[Javascript, React]	https://github.com/forensic-architecture/timemap
Mtriage	[Python, Docker]	https://github.com/forensic-architecture/mtriage

LECTURES AND SEMINARS

19.06.2021	Slow Boil 'Relations' seminar	Artspace Aotearoa, Auckland.
11.05.2021	Augmented Authorship	Lucerne University of Applied Sciences, remotely.
12-25.10.2020	Practical Introduction to DL with FastAI	Brown University, remotely.
24.09.2019	AI and Human Rights	Sigrid Rausing Trust, London.
16.09.2019	Citizen Forensics workshop	School of Machines, Berlin.
31.08.2019	Spatial Research Practice Roundtable	Flaneur Festival at HKW, Berlin.
23.07.2019	Machine Learning in Forensic Investigations	United Nations / ATI - AI, Peace, and Security, London.
17.07.2019	Machine Learning and Synthetic Data	Goldsmiths University, London.
04.07.2019	On Algorithmic Vision	Birkbeck's Critical Theory Summer School, London.
19.06.2019	Computer Visions	Princeton-Weimar Summer School for Media Studies.
21.03.2019	Using Synthetic Data	ElementAI's AI for Social Good meetup, London.
10.10.2018	Machine Learning in Counter Forensics	Princeton University (co-taught seminar).
03.11.2018	Lessons in Counter Forensics: Interpretation	Turner Prize seminars at Tate Britain.

SELECTED INVESTIGATIONS AT FORENSIC ARCHITECTURE

For the full list see my profile at https://forensic-architecture.org/about/team/member/lachie-kermode.

17.11.2020	The Beirut Port Explostion	https://forensic-architecture.org/investigation/beirut-port-explosion
28.10.2020	Brutality at BLM Protests	https://forensic-architecture.org/investigation/police-brutality-at-the-black-lives-matter-protests
19.08.2019	The Battle of Ilovaisk	https://forensic-architecture.org/investigation/the-battle-of-ilovaisk
21.03.2018	The Grenfell Tower Fire	https://forensic-architecture.org/investigation/the-grenfell-tower-fire

Exhibitions

10.2021-01.2022	**The Moral Drift** - TAURANGA ART GALLERY *Tauranga, New Zealand* In collaboration with Fraser Crichton and Malcolm Richards, this exhibition offers a partial history of Aotearoa's state care system, uncovering a legacy of abuse and the resiliency of the survivors who continue to seek justice today. My contribution was primarily conceptual and advisory.
05-09.2021	**Slow Boil** - ARTSPACE AOTEAROA *Auckland, New Zealand* In collaboration with kaupapa M ori community group and kai security advocates Boil Up Crew, as well as a group of contributing practitioners spanning architecture, community advocacy, design, food sovereignty, software and the visual arts. Explored the relationship between the mahi ng -kai/kai rituals, and t wahi/notions of space, mana motuhake/sovereignty, and mapping. Works were collectively produced and installed over the course of the exhibition, alongside existing investigative works by Forensic Architecture.
02.06.2020	**Violent Legalities** - ADAM ART GALLERY *Wellington, New Zealand* This project cartographically chronologises three separate projects. Each aims to spatialise relationships between legislative activity and occurrences of violence to inspect enduring trends between settler-colonial law-making processes and state policies in Aotearoa/New Zealand.
20.02.2020	**Model Zoo** in **Uncanny Valley: Being human in the age of AI** - DE YOUNG MUSEUM *San Francisco, USA* This exhibition presented the research project I steered at Forensic Architecture in computer vision and synthetic data. Accompanying technical details are available at https://forensic-architecture.org/investigation/detecting-tear-gas.
13.05.2019	**Triple Chaser** in **Whitney Biennial 2019** - WHITNEY MUSEUM OF AMERICAN ART *New York, USA* Forensic Architecture's invited contribution, I worked with filmmaker Laura Poitras and Praxis Films to steer the project from a machine learning perspective. Accompanying technical details are available at https://forensic-architecture.org/investigation/cv-in-triple-chaser.
13.05.2019	**Destruction and Return in Al-Araqib** in **Turner Prize nomination 2018** - TATE BRITAIN *London, UK* An exhibition produced for Forensic Architecture's nomination for the 2018 Turner Prize, and my first investigation with the research group, I helped develop an interactive platform displaying more than 30Gb of point clouds and other citizen-mapped data in the Negev/Naqab desert.
03.2019	**Talking Popcorn's First Last Words** with **Nina Katchadourian** - FRIDMAN GALLERY *New York, USA* Sixteen people from a wide variety of fields and areas of expertise were asked to address Talking Popcorn's last words from their particular disciplinary perspectives. The soundtrack played in a room with the burned, damaged carcass of the first machine standing on a black plinth upon which was written the machine's final pronouncement.

Awards and Honours

09.2018	Top 5 (of 125+) 'Hive'	HACKZURICH 2018
09.2017	Top 25 (of 125+) 'Midnight Grain to Georgia'	HACKZURICH 2017
06.2017	Undergraduate Research Fellow	PIIRS, Berlin
2016-19	Advisory Board	Paideia Institute for Humanisitic Study
12.2015	1st Place 'ClaireCutApp'	Burda Hackday, Munich
10.2015	Dropbox API Prize 'Stitch'	HackZurich 2015
09.2015	1st Place 'Pocketbadge'	Bic Lazio Talenttime Hackathon, Rome
10.2012	1st Place	Auckland University Latin Speaking Competition

POSITIONS

09.2021- | Research Engineer (part-time)   - SOCIAL MEDIA ANALYSIS TOOLKIT [SMAT]
Remote

Full stack development and MLOPs engineering for the SMAT website and associated tooling.

09.2021- | Graduate Advisor   - BROWN UNIVERSITY - RESPONSIBLE COMPUTING INITIATIVE
Providence RI, U.S.A

Advising undergraduate teaching assistants in the computer science department in their work reforming the curriculum to give greater attention to ethical issues in the field. Also running a bi-weekly reading group in the computer science department open to all University affiliates.

02.2021- | Research Fellow   - FORENSIC ARCHITECTURE
Remote

Independent research regarding the use of machine learning using data generated from game engines, advisor to software research at the agency intermittently.

02.2021-09.2021 | Senior Software Engineer   - HALTER
Auckland, NZ

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), and infrastructure with Terraform and Concourse CI.

06.2018-02.2021 | Advanced Software Researcher   - FORENSIC ARCHITECTURE
London, UK

Directed engineering for several full stack platforms and machine learning workflows. Also sat on our data management committee for digital security, and offered expertise across investigations. See forensic-architecture.org/subdomain/oss for related publications, and github.com/forensic-architecture for the open source software I developed during this experience.

04.2020-01.2021 | Developer at The Syllabus   - THE SYLLABUS
Berlin, Germany

Designed and developed the frontend for two websites in Vue: the-syllabus.com and cabinet.the-syllabus.com (by subscription only). User-based authentication, account management (reset and deletion), payment via Stripe, and a page-display algorithm to simulate A4 pages on the web. In 2020 these websites were used by some 20,000 users.

11.2019-03.2020 | Visiting Research Fellow   - UNIVERSITY OF AUCKLAND, DEPARTMENT OF ARCHITECTURE
Auckland, New Zealand

Conceptualising and undertaking an investigation to recenter Muslim and Maori communities in New Zealand by documenting how a racialised figuration of 'the terrorist' persists in the wake of the Christchurch mosque shootings in March 2019. In partnership with Forensic Architecture.

01.2019-01.2021 | Full stack engineer   - MERANTIX
Berlin, Germany [remote]

I develop tooling for deep learning workflows on a part time basis for Merantix ventures. Working mainly in Python and the Jupyter notebook stack, we aimhttps://www.overleaf.com/project/563a21fa2a2d7d4a123ba0ed to augment tooling in industry DL. Technologies include Kubernetes, GCP, Tensorflow, Jupyter notebooks, Svelte, Vue, and React.

08.2016-03.2017 | CTO and co-founder   - DIRECT DRINKS
Wellington, NZ [remote]

We provide 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. As CTO, I developed from scratch an end-to-end platform for web, mobile, and tablet.

06-08.2016 | Mobile developer   - INFLECTION
San Francisco, USA

Developed an Objective C SDK for an OAuth2 verification flow, and prototyped two React Native applications. Contributions to Dockerized Rails backend.

06.2015-02.2016 | Digital humanities fellow   - PAIDEIA INSTITUTE
Rome, Italy

After an internship developing an iOS application in 2015, I became the inaugural Digital Humanities Fellowship, taking a year off from Princeton to head digital operations from the office in Rome. I learned Italian, renovated Paideia's website, wrote web crawlers for research and development, developed two iOS applications, and imm-proved internal operations at the institute with Google Scripts, Python, and general technical suggestions. Since the fellowship concluded, I have sat on the institute's advisory board.