# MACK DELANY

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#### Summary

Software engineer with an entrepreneurial spirit and deep product experience; seeking technical role at a mission driven company.

# Strengths

Developing beautiful interfaces, and reliable services with relentless user focus; first-rate with aws/cloud, typescript, python, react, JS, C#, docker, ci/cd, linux, SQL... can learn anything else quickly.

Deploying machine learning applications in novel domains, including carbon capture, healthcare, remote sensing and the life sciences.

Consistent first principles approach to innovation, teamwork and start ups, loves to learn and work hard with others!

# Experience

#### SENIOR SOFTWARE ENGINEER | NAI / CarbonCrop | New Zealand | 2019 - Sep 2021

NAI is an applied venture studio, CarbonCrop is a seed stage startup that democratizes access to carbon credit markets

- Co-leading team of 6 engineers in building infrastructure from ground up, including react applications, backend services, databases, distributed ML services and queues, tileservers, data pipelines, AWS infra, CI/CD services etc.
- Responsible for infra decisions, application and system design, hiring and mentorship, etc. and of course, programming!
- Built an augmented reality microscope to detect microalgae in real time for marine labs, non-trivial optimisation: classifying 100+ algae species at 100-400x magnification from 5MP video feed at >2 frames / second
- Typical ML/web stack: React, Typescript, TensorFlow, PyTorch, CUDA, Docker, AWS, CI/CD pipelines, SQL, Linux

# FOUNDER | STAN | New Zealand | 2019 - Present

STAN is a Supportive Triage Assistant which uses machine learning to help emergency departments triage patients

- Deployed cloud based application which has supported >50K emergency presentations at multiple hospitals with 99.9% uptime
- Applied state of the art natural language processing technologies to medical notes and physiological observations
- Collaborating, liaising and negotiating with emergency departments, management and IT teams
- Nurses surveyed (n=21) think <u>STAN improves triage consistency, clinical pathway uptake and high risk symptom recognition</u>
- Doing all of the above as sole founder/engineer while working full time at NAI / CarbonCrop

#### PRODUCT ENGINEER | Mish Guru | New York | 2016 - 2019

Mish Guru provides vertical video software for McDonalds, Coca Cola, Princeton and hundreds of other global brands

- Responsible for user experience and business intelligence; conducted user testing and managed product launches
- Built internal tooling using python, JS, SQL and linux using large scale production data and product integrations
- Directly supported the CEO in raising USD \$6m of venture capital

# Education

#### BACHELOR OF ENGINEERING WITH HONORS (CIVIL) | University of Canterbury | 2012 - 2015

Honors GPA of 3.63 (4.0 Scale), specialized in fluid dynamics and hydrology

#### Personal

- Eligible to work in Europe, the UK, Australia and New Zealand, can work in the US with sponsorship (has H-1B visa)
- Loves skiing, mountain biking, basketball, running, good stories, hiking, adventures, museums and books