# onathan Ng

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# **EDUCATION**

# PROFESSIONAL EXPERIENCE

# NUS (NATIONAL UNIVER-SINGAPORE AI SAFETY INSTITUTE (AISI) | SPECIAL PROJECTS SITY OF SINGAPORE)

**BCOMP IN INFORMATION SECURITY** 

December 2021 | Singapore, SG

# LINKS

Github://derpyplops LinkedIn:// Jonathan Ng

# SKILLS

#### **PROGRAMMING**

Proficient:

Python • Scala • VueJS JS • SQL • React

Familiar: Java• Shell

Golang • C++ • C

# **TOOLS & FRAMEWORKS**

Apollo GQL • ZIO • Play Framework AWS • GRPC • Jest

AsciiDoc • Redux

express.js • Kafka • Docker

#### **INTERESTS**

#### Effective Altruism

'20, Spring '21)

NUS Chapter Lead

#### **MISC**

ARENA (arena.education)

- Implemented PPO, BERT, GPT (and more) from scratch.
- Contributed to TransformerLens, an open source library for interpretability research.

#### ASSOCIATE Nov 2024 - Present

- Organized and conducted undergraduate AI Safety Fellowship, with two tracks: Technical and Governance, two top Singapore universities.
- Organized and conducted RECAP (recap.sg), a 4-week intensive research engineer career accelerator in Singapore.

#### **APART RESEARCH** | RESEARCH ENGINEER (CONTRACTING)

Apr 2024 - November 2024

- First author on Catastrophic Cyber Capabilities Benchmark (3CB): Robustly Evaluating **LLM Agent Cyber Offense Capabilities** (AAAI DATASAFE Workshop '25)
- Designed and implemented 11 complex cybersecurity LLM agent evals
- Implemented multi-Docker agent evaluations in our agent LLM scaffolding
- Wrote and conducted experiments across 14 language models, across Anthropic, OpenAI, TogetherAI, Replicate

#### **SURVEYOR** | Sole Engineer

Oct 2023 - Dec 2024

- Founded Surveyor, a webapp to build and deploy surveys. Backend, UX design, architecture and prompt engineering.
- Implemented data pipeline for robustly parsing surveys from LM outputs, inclusive of conducting experiments and writing tests
- Oversaw sub-contractor work on productionizing via containerization. > VueJS, TypeScript, Firestore DB, OpenAl API

#### CADENZA LABS | RESEARCH ENGINEER

Apr 2023 - Oct 2023

- Arete Fellowship (SG) Organizer (Fall Developed the Eleuther Al/elk library, a white-box LLM interpretability library for training "truth-seeking" probes
  - Coordinated and conducted large sweeps across multiple GPU clusters, conducted original experiments

# MACHINE ALIGNMENT THEORY SCHOLARS (MATS) | RESEARCH **ENGINEER**

Jan 2023 - March 2023 | Singapore

- Participated in seminars and workshops relating to Al Alignment, mentored by Dr Dan Hendrycks.
- Authored the Machiavelli paper (ICML23), created a data collection platform on Streamlit (repo) (paper).
- Worked with the trlx library to train LMs on an ethics dataset via RLHF.

### **LEADIQ** | SOFTWARE ENGINEER (FULL-STACK)

Apr 2020 - June 2022 | Singapore

- Implemented Self-Serve Single Sign-On, a feature that automates SSO client setup, and cuts a 2-3 week long process down to a day. Won internal hackathon, 1st place. Idea to production-ready in 1 month.
  - > OAuth 2.0
- Built Slack Bot delivering Job Change Notifications.
  - > Kafka, Scala, ZIO, Slack API
- Built Assign Sequences with Outreach.io API. > Vue, CSS, HTML, ApolloGQL, Scala