## **NEEV PARIKH**











## **EXPERIENCE**

## **ML Research Engineer**

**METR** 

📋 Sep 2024 – Present

Berkeley, CA

- Working on AI misalignment research (model organisms, chain-of-thought monitoring, etc.)
- Worked on developing state-of-the-art evaluations for automated AI R&D; see publications

## **Software Engineer II**

Stripe

**i** Jul 2022 – Sep 2024

San Francisco, CA

- Built LLM and ML-based customer insights platform, with per-customer predictions and calculated business metrics.
- Built polished data-repair tooling for self-serve, developer use, which drove self-serve repairs from 60% to 90%, increased system adoption from 40% to 60%, and saved 120 hours per year.
- Built high-performance, **5min** time-to-alert, automated testing system in Java, with instrumented metrics like availability and latency.
- Built terabyte-per-hour scale, Hadoop-based data pipelines in Scala Spark to ingest financial data in a double-entry, event-based, immutable log.

## **Research Engineering Intern**

**Common Sense Machines** 

**i** May 2021 – Aug 2021

Boston, MA

- Implemented large-scale, auto-regressive Seq2Seq models for working with 3D geometry from images.
- Worked with Deepspeed to explore scaling options for 500M+ param models to feasibly scale existing sequence-based models.
- Implemented a Blender-based Gym environment for RL to optimize textures on a 3D model.
- Implemented a graphics algorithm to find surface patches in a 3D wireframe (Zhang et. al., 2013)
- Dockerized AWS pipeline to create cloud-independent dev/production environment.

## **Research Assistant**

Jun 2020 – May 2022

**Brown University** 

Providence, RI

• Worked on original research on unsupervised, representation learning and multi-task reinforcement learning; see publications.

## **EDUCATION**

## M.Sc. in Computer Science **Brown University**

iii Aug 2018 – May 2022 (Concurrent)icolor<

Advised by: **Prof. George Konidaris** 

# B.Sc. in Computer Science Brown University

**a** Aug 2018 – May 2022 (Concurrent)

CPA: 3.9 (magna cum laude)

Advised by: Prof. Michael Littman

## **PROJECTS**

#### **Hierarchical Doom**

High-throughput, distributed RL project to train asyncronous PPO-Option Critic on the VizDoom environment

neevparikh/hierarchical-doom

#### IP/TCP

IP/TCP system on an abstracted virtual link layer in Rust, with split horizon and poison reverse.

neevparikh/ip-tcp

### **Volumetric Photon Mapping**

Volumetric photon mapping by extending an open-source, Rust-based path tracer, based on Bitterli et. al. (presentation).

neevparikh/rpt

### **Spaceport**

Tiny MacOS utility written in Rust (with Obj-C bindings) to partly replace the deprecated airport utility.

neevparikh/spaceport

## **PUBLICATIONS**

- H. Wijk et al. (2025). "RE-Bench: Evaluating Frontier AI R&D Capabilities of Language Model Agents against Human Experts". In: Forty-second International Conference on Machine Learning. URL: https://openreview.net/forum?id=3rB0bVU6z6.
- T. Kwa et al. (2025). Measuring Al Ability to Complete Long Tasks. arXiv: 2503.14499 [cs.AI]. URL: https://arxiv.org/abs/2503. 14499.
- M. Merlin, S. Parr, et al. (May 2024). "Robot Task Planning Under Local Observability". In: *Proceedings of the 2024 IEEE Conference on Robotics and Automation*.
- C. Allen, N. Parikh, and G. Konidaris (Dec. 2021). "Learning Markov State Abstractions for Deep Reinforcement Learning". In: 34th Neural Information Processing Systems Conference 2021.
- K. Asadi, N. Parikh, R. Parr, G. Konidaris, and M. Littman (Sept. 2020). "Deep Radial-Basis Value Functions for Continuous Control". In: 35th AAAI Conference on Artificial Intelligence 2021.
- N. Parikh\*, Z. Horvitz\*, N. Srinvasan\*, A. Shah, and G. Konidaris (Oct. 2020). "Graph Embedding Priors for Multi-task Deep Reinforcement Learning". In: *NeurIPS 2020. KR2ML Workshop*.
- M. Merlin, N. Parikh, E. Rosen, and G. Konidaris (May 2020). "Locally Observable Markov Decision Process". In: *International Conference on Robotics and Automation. Workshop on Perception, Action, Learning.*