Daniel A. Scott

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Education

- **M.S. Computer Science, Georgia Institute of Technology** *2021 - 2023*
  - Coursework: Reinforcement Learning, Machine Learning, Deep Learning, Artificial Intelligence, Computer Vision, Advanced OS, Network Science, Cognitive Science, Graduate Algorithms
- **B.S. Computer Engineering, University of Florida** *2014 - 2018*

Experience

- **Senior Associate, AI Research - J.P. Morgan Chase** *June 2023 - Present*
  - Large language model tool-use (APIs); methods for watermarking (synthetic) data [4]
- **Graduate Research Assistant - Georgia Institute of Technology** *Jan 2023 - May 2023*
  - Multi-agent Reinforcement Learning with Prof. Charles Isbell
  - Surveyed interdisciplinary techniques for defining and measuring multi-agent interaction with applications to deep multi-agent reinforcement learning
- **Graduate Research Assistant - Brown University** *May 2022 - Aug 2022*
  - Reinforcement Learning with Prof. Michael Littman and Prof. George Konidaris
  - Investigated methods for reliably detecting state-aliasing in POMDPs and using this signal to search for memory functions that allow for finding higher performing policies [3].
- **Software Engineer - Kanga.gg (Game Prophecies)** *July 2020 - March 2021*
  - Computer vision inference pipeline (reduced cost by 60%), data aggregation, web/mobile backend using AWS, Golang, Python, NodeJS
- **Software Engineer - Magic Leap** *March 2020 - June 2020*
  - k3s testing env for Elixir containers processing device data for Passable World content persistence
- **Software Engineer - Levatas** *Jan 2019 - March 2020*
  - Enterprise Cloud Architecture - implemented cloud strategies for REST APIs, microservices, and NLP data pipelines using AWS, Serverless Framework, Nodejs, Python, Jenkins
  - Tech Lead - 7 person dev team: set priorities, assignments, and workflow; reviewed PRs; communicated infrastructure strategies with client stakeholders, and demoed implementations
  - Client projects - Orangetheory, Nextera Energy
- **Open Source Contributor**
  - https://github.com/dsctt - Contributor to open-source research libraries around topics including Language Models and Reinforcement Learning such as OpenELM, PettingZoo, and MAgent2

Publications & Pre-prints

[1] H. Bradley, H. Fan, T. Galanos, R. Zhou, D. Scott, J. Lehman. (2023). **The OpenELM Library: Leveraging Progress in Language Models for Novel Evolutionary Algorithms.** *Pre-print*. *Code* contribs.

[2] J. Suárez, D. Bloomin, K.W. Choe, H.X. Li, R. Sullivan, N. Kanna, D. Scott, R. Shuman, H. Bradley, L. Castricato, P. Isola, C. Yu, Y. Jiang, Q. Li, J. Chen, X. Zhu. (2023). **Neural MMO 2.0: A Massively Multi-task Addition to Massively Multi-agent Learning.** *NeurIPS 2023*.

[3] C. Allen, A. Kirtland, R.Y. Tao, S. Lobel, D. Scott, N. Petrocelli, O. Gottesman, R. Parr, M.L. Littman, G. Konidaris. (2024). **Mitigating Partial Observability in Sequential Decision Processes via the Lambda Discrepancy.** *Neurips 2024. Pre-print. Blog post. Code* contribs.

[4] D. Ngo, D. Scott, S. Obitayo, V. Potluru, M. Veloso. (2024). **Adaptive and Robust Watermark for Generative Tabular Data.** *Pre-print*.