

Daniel Rowe Jacobson

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PROFESSIONAL EXPERIENCE

Lockheed Martin

Tech Lead, Senior Staff ML Engineer 2021—present

- Leads 26 Research and ML Engineers.
- Led “internal ChatGPT”. Entirely on-prem, serving 100,000 users.
 - Saved \$X00,000 last year (estimated with OpenAI token prices).
- Led [AI for Firefighting](#) reinforcement learning team.
 - Designed novel hierarchical reinforcement learning system.
- Teaches corporation-wide master classes in deep learning and AI.

Staff Data Scientist 2021

- Grew Data Science team from 3 to 7 engineers.
- Built NLP system for Flight Safety Team.
 - Reduced engineering labor time 10x (hours per report to minutes).
- Built clustering solution for manufacturing defects.
 - Analyzes 500,000+ defects, daily, across 20 manufacturing sites.

Senior Data Scientist 2019—2021

- Analyzed 10,000 buildings sensors, identified \$X00,000 in cost reduction.
 - Won two 2020 Excellence awards.

Food and Drug Administration

Biomedical Engineer 2014—2019

- Mined hospital data for medical device safety signal and risk profiles.
 - Used clustering, XGBoost, and neural networks.
 - Led project to Commissioner’s “Critical Path” Award.

EDUCATION

Brown University 2010—2014

B.S. in Biomedical Engineering

- Senior capstone: “Coherence of polychronic firing patterns in neural networks with various 3D architectures”.

SKILLS

Python

numpy, pandas, polars, scipy, scikit-learn,
streamlit, flask, fastAPI, litestar

Computers

docker, git, bash, general linux stuff
good CI/CD — lint, format, tests, build, scan

Deep Learning

pytorch (my preference), jax, tensorflow,
rllib, ray, langchain, 🤗, optuna, deepspeed

Cloud // Deployment

AWS, GCP, openshift, kubeflow, kserve, vllm
postgres, MySQL

AWARDS

Facilities Excellence Award, Lockheed Martin 2020
for outstanding work on the SMARTBuildings Initiative.

ESH Excellence Award, Lockheed Martin 2020
for outstanding work on the SMARTBuildings Initiative.

CDRH Excellence in Postmarket Safety Award, FDA 2018
for excellence in enhancing and taking new approaches to safety signal detection.

CDRH Excellence in Customer Service Award, FDA 2018
for excellence in providing consistent customer service to internal and external stakeholders.

SCHOLARSHIP

Deep Reinforcement Learning for Wildland Fire Management Oct 2024
Ray Summit — San Fransisco, CA

- Oral presentation on our [multi-agent, hierarchical reinforcement learning approach](#).
- Full presentation available upon request.

Highly Proliferative α -Cell-Related Islet Endocrine Cells in Human Pancreata Apr 2018
Lam CJ, Cox AR, Jacobson DR, Rankin MM, Kushner JA.
Diabetes 2018 Apr; 67(4):674-686. doi: 10.2337/db17-1114.

Unique Device Identifier Database Integration for Clinical Engineers Apr 2018
Jacobson, Daniel R.
Journal of Clinical Engineering. 443(2):71-74, April/June 2018.
doi: 10.1097/JCE.0000000000000264

B-Cells Persist in T1D Pancreata Without Evidence of Ongoing B-Cell Turnover or Neogenesis Aug 2017
Lam CJ, Jacobson DR, Rankin MM, Cox AR, Kushner JA.
Journal of Clinical Endocrinology & Metabolism. 2017 Aug 1;102(8):2647-2659.
doi: 10.1210/jc.2016-3806