Alexander **Johansen**

STANFORD · USA

⌂ alrojo.github.io | ⌂ alrojo | in alexrosejo | 🐦 @alexrosejo

Education

Stanford University   *Stanford, California, USA*
PH.D. COMPUTER SCIENCE   *Sep 2020 - now*
StatML work and LLM applications to biomedical sensors

Technical University of Denmark   *Kongens Lyngby, Denmark*
M.SC. MATHEMATICAL MODELING AND COMPUTATION, GPA: 11.44/12.00   *Sep 2014 - Dec 2016*
Exchange Nanyang, Singapore, thesis on neural machine translation

Copenhagen Business School   *Frederiksberg, Denmark*
B.SC. BUSINESS ADMINISTRATION AND INFORMATION SYSTEMS, GPA: 10.70/12.00   *Sep 2011 - Jun 2014*
Exchange Lincoln, New Zealand

Experience

Technical University of Denmark   *Kongens Lyngby, Denmark*
RESEARCH ASSISTANT   *Jan 2019 - Jan 2020*
Supervised and conducted research with +30 students on machine learning methodology and language models for proteomics.

Salesforce   *Palo Alto, California, USA*
DEEP LEARNING RESEARCH, INTERN   *Jan 2017 - Jan 2018*
Research on deep learning for natural language processing, supervised by Richard Socher, PhD.

Selected publications

2025	**arXiv**, *TD(0) Learning converges for Polynomial mixing and non-linear functions.* A. Sridhar and A. Johansen	*Under Review*
2023	**ACM ITSG**, *CliniDigest: a case study in large language model based large-scale summarization of clinical trial descriptions.* R. White, T. Peng, P. Sripitak, A. Johansen, Michael Snyder	*Workshop*
2022	**Nature Biotechnology**, *SignalP 6.0 achieves signal peptide prediction across all types using protein language models.* F. Teufel, J. Armenteros, A. Johansen, M. Gíslason, S. Pihl, K. Tsirigos, O. Winther, S. Brunak, G. Heijne, H. Nielsen	*Journal*
2022	**Nucleic Acids Research**, *DeepLoc 2.0: multi-label subcellular localization prediction using protein language models* V. Thumuluri, J. Armenteros, A. Johansen, H. Nielsen, O. Winther	*Journal*
2020	**ICLR**, *Neural arithmetic units.* A. Madsen and A. Johansen	*Spotlight*

Patents

2022	**US Patent 11,354,565**, *Probability-Based Guider.* A. Johansen, B. McCann, J. Bradbury, R. Socher	*Approved*
2022	**US Patent 11,250,311**, *Deep Neural Network-Based Decision Network.* A. Johansen, B. McCann, J. Bradbury, R. Socher	*Approved*

Skills & Courses taken

Math Linear dynamical systems, convex optimization 1 & 2, measure theory, machine learning theory, stochastic processes, analysis
Computer Science Networking, verilog, operating systems, parallel programming, databases, algorithms 1 & 2.
Machine Learning Classic ML, deep learning, reinforcement learning, natural language processing, large language models
Student Management I have had the fortunate opportunity to supervise M.Sc., B.Sc., and High school students to high-impact publications.
Teachings Deep learning, natural language processing, reinforcement learning