



The University of Texas at Austin
Dell Medical School

Department of Neurology • Health Discovery Building, Suite 5.708 • 1701 Trinity St. • Austin, TX 78712 • T: 512-495-5196

The [Paydarfar Lab](#) is seeking a versatile, scientifically-oriented full-time computational research fellow at Dell Medical School, Department of Neurology to assist in developing new technologies and algorithms to advance and optimize healthcare both at an individual level as well as a community and hospital level.

Current projects include:

- Developing optimization algorithms for electroceutical devices
- Tracking dementia decline and healthcare response among individual patients
- Predicting and classifying outcomes in the ICU at the individual level as well as at the unit level in real-time
- Modeling healthcare system networks to drive and optimize value at a community level

Required education and training:

- Bachelor's degree or higher in computer science, engineering or a related discipline
- Experience implementing mathematical programming algorithms in one or more of the following languages: MATLAB, Java, C++, Python
- Demonstrates the ability to learn advanced concepts across a wide variety of quantitative and scientific fields such as probability theory, mathematical optimization, and artificial intelligence.
- Comfortable balancing and supporting multiple different projects

Preferred requirements:

- Experience applying core machine learning methodologies: regression analysis, clustering, neural networks, k-nearest neighbors, support vector machines, decision trees, deep learning
- Proficient in MATLAB and / or Python

Job duties:

The candidate will be responsible for implementing various algorithms in code. As the candidate gains familiarity with the various problems and the current state-of-the-art algorithms, it is expected that the candidate will work to maintain an awareness of on-going research in a variety of disciplines.

Application process:

If you are interested in applying for this position, please submit a cover letter and CV to Joshua Chang (joshua.chang@austin.utexas.edu).