



Overview

Week 1

Week 2

Week 3

Week 4

Grades

Notes

Discussion Forums

Messages

Course Info

Week 1

AI for Medical Prognosis

Week 1

Discuss this week's modules here.
104 threads · Last post 4 days ago

Go to forum

Linear prognostic models



Build a linear prognostic model using logistic regression, then evaluate the model by calculating the concordance index. Finally, improve the model by adding feature interactions.

Learning Objectives

- Build a linear prognostic model.
- Evaluate the prognostic model by calculating the concordance index.
- Improve the prognostic model by adding feature interactions.

⤴ Less

Introduction to Prognostic models

▶ **Video:** Course 2 Intro with Andrew and Pranav 2 min

Resume

▶ **Video:** Prerequisites and Learning Outcomes 1 min

📖 **Reading:** Connect with your mentors and fellow learners on Slack! 10 min

What is the risk of getting a disease?

▶ **Video:** Medical Prognosis 2 min

📅 **Lab:** Create a linear model 1h

Prognostic models in medical practice

▶ **Video:** Examples of Prognostic Tasks 2 min

▶ **Video:** Atrial fibrillation 2 min

▶ **Video:** Liver Disease Mortality 2 min

▶ **Video:** Risk of heart disease 2 min

📅 **Lab:** Risk Scores, Pandas and Numpy 1h

Representing feature interactions

▶ **Video:** Risk Score Computation 4 min

📅 **Lab:** Combine Features 1h

Evaluating prognostic models

Evaluating prognostic models

- ▶ **Video:** Evaluating Prognostic Models 1 min
- ▶ **Video:** Concordant Pairs, Risk Ties, Permissible Pairs 2 min
- ▶ **Video:** C-Index 3 min
- 📄 **Lab:** Concordance index 1h

Quiz week 1

- 📋 **Practice Quiz:** Week 1 Quiz 10 questions

Assessment: Build a Linear Risk model

- 📖 **Reading:** Please save your work regularly 10 min
- 📖 **Reading:** About the automatic grader 10 min
- 🔗 **Programming Assignment:** Build and Evaluate a Linear Risk model 3h

Due Nov 9, 1:59 AM CST
- 📖 **Reading:** How to refresh your workspace 10 min

