



Satuan Acara Pengajaran

MAT30904 - Survival Analisis (A/S)

Pengajar

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Tujuan Perkuliahan

Setelah mengikuti mata kuliah ini, mahasiswa diharapkan mampu: 1. Memahami konsep statistika untuk menganalisis data time to event 2. Menerapkan teknik analisa survival pada problem asuransi dan keuangan

Minggu 1

Materi Introduction to survival analysis;
contoh - contoh permasalahan dan bentuk data pada survival analysis.

Media white board

Referensi Buku: Survival Analysis; Techniques for Censored and Truncated Data; Klein and Moeschberger; 1997 Springer Verlag New York.

Aktivitas

Minggu 2

Materi Basic quantities: pdf, the survival function, the hazard rate, mean residual life (mrl)

Media

Referensi

Aktivitas

Minggu 3

Materi mrl & median life;
common parametric models;
regression models for survival data;
censoring.

Media

Referensi

Aktivitas

Minggu 4

Materi Censoring;
Truncation;
Likelihood construction for censored and truncated data
Kaplan Meier Estimator

Media

Referensi

Aktivitas

Minggu 5

Materi NonParametric Estimation: Kaplan Meier Estimation
Confidence Intervals for the estimator of Survival Function

Media

Referensi

Aktivitas

Minggu 6

Materi Review Kaplan Meier;
Nelson Aalen Estimator of $S(t)$;
Confidence Bands for $S(t)$
Point and Interval Est. of the mean and Median of $S(t)$

Media

Referensi

Aktivitas

Minggu 7

Materi Confidence Bands for $S(t)$;
Point and Interval Estimates of mean $S(t)$ & median $S(t)$;
Estimation of $S(t)$ for left truncated and right censored data

Media

Referensi

Aktivitas

Minggu 8

Materi UTS

Media

Referensi

Aktivitas

Minggu 9

Materi Hypothesis Testing : One Sample Tests (Log rank test)

Media

Referensi

Aktivitas

Minggu 10

Materi Hypothesis Testing: Test for two or more samples, Trend test

Media

Referensi

Aktivitas

Minggu 11

Materi Semiparametric Proportional Hazard Regression with fixed Covariates
Local Tests

Media

Referensi

Aktivitas

Minggu 12

Materi Partial Likelihood when Ties are Present : Methods of: Efron, Breslow, Exact.
Examples of S-Plus commands and output; Interpretation
Summary

Media

Referensi

Aktivitas

Minggu 13

Materi Analisis Model; Perbaikan Model Cox-PH

Media

Referensi

Aktivitas

Minggu 14

Materi UAS

Media

Referensi

Aktivitas
