

Bachelorarbeit

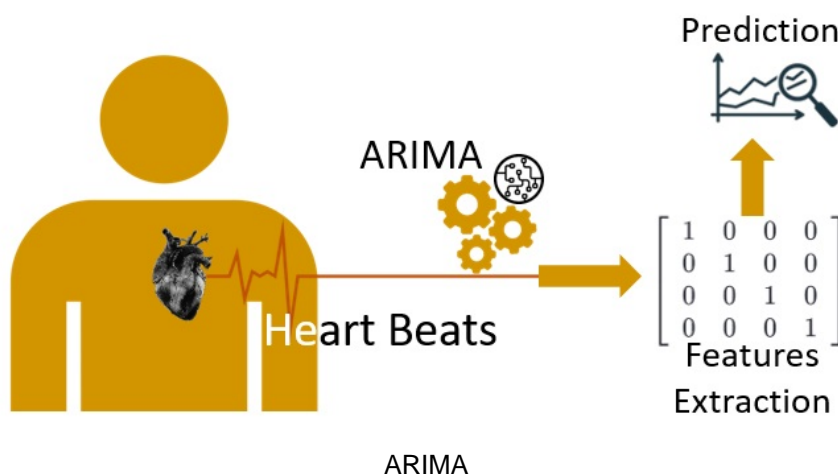
Time Series Modeling and Forecasting of Blood Pressure Signals Using ARIMA Models

Motivation

I invite one of you to join me in a compelling project: Time Series Modeling and Forecasting of Blood Pressure Signals using ARIMA Models. This is more than an academic pursuit; it's a chance to contribute directly to healthcare advancements.

Engage with cutting-edge technology, receive mentorship, and work in a collaborative environment that values your unique perspective. This project offers interdisciplinary learning and the opportunity to make a real-world impact.

If you're passionate about data science, healthcare, and making a difference, seize this chance to learn, grow, and leave your mark.



Problem Statement

ARIMA models are specified by three parameters: p, d, and q, which represent the order of the autoregressive, integrated, and moving average components, respectively. ARIMA models can be fitted to the data using various methods, such as maximum likelihood, least squares, or Bayesian inference.

Forecasting blood pressure signals using ARIMA models can have various applications, such as monitoring, diagnosis, treatment, or prevention of cardiovascular diseases, hypertension, or other related conditions.

Prior knowledge

- Experiences with Matlab/Python programming
- Basic knowledge of signal and Machine learning

Research area

- Signal processing
- Machine learning

Studiengang

- ☒ Elektro- und Informationstechnik
- ☐ Informatik
- ☒ Mechatronik
- ☒ Medizintechnik

Alignment

- ☒ Method development
- ☒ Research
- ☒ Implementation
- ☒ Modelling

Start

Immediately

Links

[Mitarbeiter](#)

Contact person

M.Sc. Abdullah Al-Hammadi
Westhochschule, Hertzstr. 16
Geb. 06.35, Zimmer 120.3
abdullah.al-hammadi@kit.edu
Tel.:(0721) 608-44524