

Senior Thesis Topic Proposal Draft

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I will be working with Professor Imanaliev on the following research project (cited from the research proposal).

Topic	Application of novel mathematical and computerized methods for ECG (Electrocardiogram) analysis
Researcher	Professor Taalaibek Imanaliev
Assistants	Ilya Solomonov Moritz Konarski
Main Objective	work out simple, accurate, automatized electrocardiographic analysis tool for the assessment of prognosis in various forms of ischemic heart disease

The plan is to develop software that analyzes a 12-lead ECG for 10 cardiac cycles. The goal is to see if automated computer ECG analysis can provide a benefit for the diagnosis and treatment of ischemic heart disease (<https://www.heart.org/en/health-topics/heart-attack/about-heart-attacks/silent-ischemia-and-ischemic-heart-disease>).

References

1. Research Proposal Draft, Imanaliev T.