

Analysis of TransUnet

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Abstract—The electrical behaviors of specific kinds of organs and structures in the human body provide crucial information about the workings of physiological-level structures and mechanisms of certain diseases. For diagnosis regarding such structures, many imaging methods have been developed exploiting these behaviors. To do so, a good understanding of electrical cell behavior is required. This report provides a theoretical background for the action potential behavior, using Hodgkin-Huxley’s explanation, and explains the methodology to create a simulation software that illustrates the generation and propagation of the action potentials. The developed code is available online at <https://github.com/kutay-ugurlu/Hodgkin-Huxley-Membrane-Model>

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