

REFERENCES

- Abudan, A., Isath, A., D. Ryan, J., J. Henrich, M., L. Dugan, J., Attia, Z., . . . Friedman, P. (2019). *Safety and Compatibility of Smart Device Heart Rhythm Monitoring in Patients with Cardiovascular Implantable Electronic Devices (CIEDs)*.
- Adabag, A. S., Luepker, R. V., Roger, V. L., & Gersh, B. J. (2010). Sudden cardiac death: epidemiology and risk factors. *Nat Rev Cardiol*, 7(4), 216-225. doi:10.1038/nrcardio.2010.3
- Auer, R., Bauer, D. C., Marques-Vidal, P., Butler, J., Min, L. J., Cornuz, J., . . . Rodondi, N. (2012). Association of Major and Minor ECG Abnormalities with Coronary Heart Diseases Events. *Journal of American Medical Association*, 307(14), 1497–1505.
- Beach, C., Krachunov, S., Pope, J., Fafoutis, X., Piechocki, R. J., Craddock, I., & Casson, A. J. (2018). An Ultra Low Power Personalizable Wrist Worn ECG Monitor Integrated With IoT Infrastructure. *IEEE Access*, 6, 44010-44021. doi:10.1109/access.2018.2864675
- Benjamin, E. J., Virani, S. S., Callaway, C. W., Chang, A. R., Cheng, S., Chiuve, S. E., . . . Muntner, P. (2018). Heart Disease and Stroke Statistics 2018 At a Glance. *AHA Journal*. doi:DOI: 10.1161/CIR.0000000000000558
- CircuitBasics. Basic UART Communication. Retrieved from <http://www.circuitbasics.com/basics-uart-communication/>
- Feng, F., Wang, J., Liu, L., Luo, J., & Huang, Y. (2018). *Long short-term memory based electrocardiogram diagnosis for premature ventricular contraction in children*.
- Goldberger, A. L., Amaral, L. A. N., Glass, L., Hausdorff, J. M., Ivanov, P. C., Mark, R. G., . . . Stanley, H. E. (2000). PhysioBank, PhysioToolkit, and PhysioNet: Components of a New Research Resource for Complex Physiologic Signals. *Circulation*, 101(123):e215-e220.
- Grusin, M. Serial Peripheral Interface (SPI). Retrieved from <https://learn.sparkfun.com/tutorials/serial-peripheral-interface-spi/all>
- Iskandar, A. A. (2017). *A Chest-strap Wearable Device for Real-time Atrial Fibrillation Detection*. Doctoral Thesis / Dissertation. Julius Maximilians Universität Würzburg, Graduate School of Science and Technology. Würzburg, Germany.

- Laciar, E., & Valentinuzzi, M. (2010). Ventricular Fibrillation Detection. In (pp. 115-138).
- Lee, M., Park, D., Dong, S.-Y., & Youn, I. (2018). A Novel R Peak Detection Method for Mobile Environments. *IEEE Access*, 6, 51227-51237. doi:10.1109/access.2018.2867329
- Lowe, A., Oh, T. H., & Stewart, R. (2018). Screening for Atrial Fibrillation During Automatic Blood Pressure Measurements. *IEEE J Transl Eng Health Med*, 6, 4400307. doi:10.1109/JTEHM.2018.2869609
- M. Barrett, P., Komatireddy, R., Haaser, S., Topol, S., Sheard, J., Encinas, J., . . . J. Topol, E. (2014). *Comparison of 24-hour Holter Monitoring with 14-day Novel Adhesive Patch Electrocardiographic Monitoring* (Vol. 127).
- Maron, B. J., Friedman, R. A., Kligfield, P., Levine, B. D., Viskin, S., Chaitman, B. R., . . . Thompson, P. D. (2014). Assessment of the 12-lead ECG as a screening test for detection of cardiovascular disease in healthy general populations of young people (12-25 Years of Age): a scientific statement from the American Heart Association and the American College of Cardiology. *Circulation*, 130(15), 1303-1334. doi:10.1161/cir.0000000000000025
- Mei Wang, C., & Cai Xiao, W. (2013). *Second-Order IIR Notch Filter Design and Implementation of Digital Signal Processing System* (Vol. 347-350).
- Moody, G. B., & Mark, R. G. (2001). The impact of the MIT-BIH Arrhythmia Database. *IEEE Eng in Med and Biol*, 20(23):45-50.
- Navidi, W. (2010). *Principles of Statistics for Engineers and Scientists (1st ed.)*. New York, NY: McGraw-Hill.
- Nolle, F. M., Badura, F. K., Catlett, J. M., Bowser, R. W., & Sketch, M. H. (1986). CREI-GARD, a new concept in computerized arrhythmia monitoring systems. *Computers in cardiology*, 13, 515-518.
- Oweis, R., & O. Al-Tabbaa, B. (2014). *QRS Detection and Heart Rate Variability Analysis: A Survey* (Vol. 2).
- Pan, J., & Tompkins, W. J. (1985). A Real-Time QRS Detection Algorithm. *IEEE Transactions on Biomedical Engineering*, BME-32(3), 230-236. doi:10.1109/TBME.1985.325532

- Pandeya, S., Voorsluys, W., Niua, S., Khandoker, A., & Buyya, R. (2012). An autonomic cloud environment for hosting ECG data analysis services. *Future Generat. Comput. Syst.*, 28(1), 147–154. doi:10.1016/j.future.2011.04.022
- Radhwane, B. (2013). *Analyse du signal ECG par réseau adaptatif d'ondelettes en vue de la reconnaissance de pathologies cardiaques.*
- Ramesh, G., Satyanarayana, D., & Sailaja, M. Automatic Detection of Cardiac Arrhythmia through ECG Signal Analysis: A Review. *IOSR Journal of VLSI and Signal Processing*, 7(6), 01-12. doi:10.9790/4200-0706010112
- Sanamdikar, S. T., Hamde, S. T., & Asutkar, V. G. (2015). A Literature Review on Arrhythmia Analysis of ECG Signal. *International Research Journal of Engineering and Technology (IRJET)*, 02(03).
- Townsend, K. (2014). Introduction to Bluetooth Low Energy. *GATT*. Retrieved from <https://learn.adafruit.com/introduction-to-bluetooth-low-energy/gatt>
- Walsh, J. A., 3rd, Topol, E. J., & Steinhubl, S. R. (2014). Novel wireless devices for cardiac monitoring. *Circulation*, 130(7), 573-581. doi:10.1161/circulationaha.114.009024
- Wang, K., Ma, S., Feng, J., Zhang, W., Fan, M., & Zhao, D. (2012). Design of ECG Signal Acquisition System Based on DSP. *Procedia Engineering*, 29, 3763-3767. doi:<https://doi.org/10.1016/j.proeng.2012.01.567>

SWISS GERMAN UNIVERSITY