BAB V

KESIMPULAN

5.1 Kesimpulan

Berdasarkan hasil pengujian dapat diambil beberapa kesimpulan sebagai berikut :

1. Objektif pertama sudah tercapai. Bukti capaian dapat dilihat pada Bagian 4.1. Dimana prototipe alat rekam irama jantung berbasis sinyal PPG telah dibuat dan berhasil membaca sinyal dengan baik.
2. Objektif kedua sudah tercapai. Bukti capaian dapat dilihat pada Bagian 4.4. Dimana studi algoritma ekstraksi fitur telah dilakukan dengan menggunakan metode *Time domain features, Shannon rntropy*, dan *Statistical.*
3. Objektif ketiga sudah tercapai. Bukti capaian dapat dilihat pada Bagian 4.5. Dimana performansi algoritma telah dianalisis dan hasil pengujian tiap skenario dapat dilihat pada Tabel 9, Tabel 10, dan Tabel 11.

5.2 Saran

Berdasarkan penelitian yang telah dilakukan, terdapat beberapa pengembangan yang dapat dilakukan untuk penelitian selanjutnya, yaitu :

1. Meneliti denoising sinyal PPG untuk meningkatkan akurasi deteksi.
2. Meneliti klasifikasi terbaik untuk melakukan klasifikasi penyakit aritmia menggunakan sinyal PPG.
3. Menggunakan algoritma yang lebih baik untuk ekstraksi fitur sinyal PPG.
4. Mendeteksi penyakit lain selain AF dan PVC.

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