

## 5. Kesimpulan

Pada penelitian ini sistem yang dibuat sudah memenuhi *requirement* yang telah ditentukan yaitu pertama sistem sudah bisa mendeteksi gelombang seismic menggunakan sensor akselerometer MPU6050. Sistem yang dibuat juga sudah dapat memberikan *warning* ketika terjadi gempa dan sistem yang dibuat juga sudah dapat mengambil keputusan apakah arus listrik harus diputus atau tidak berdasarkan data kekuatan dan durasi gelombang yang dideteksi menggunakan *fuzzy*.

## Daftar Pustaka

- [1] M. Bilal and A. Askan. Relationships between felt intensity and recorded ground-motion parameters for turkey. *Bulletin of the Seismological Society of America*, 104(1):484–496, 2014.
- [2] G. Eiby. The modified mercalli scale of earthquake intensity and its use in new zealand. *New Zealand journal of geology and geophysics*, 9(1-2):122–129, 1966.
- [3] A. Gama-García and A. Gómez-Bernal. Relationships between instrumental ground motion parameters, and modified mercalli intensity in guerrero, mexico. *The*, 14:12–17, 2008.
- [4] Z. Hannum. Perancangan rangkaian informasi gempa ditampilkan pada running text, 2015.
- [5] S. Kramer and S. B. Upsall. Instrumental intensity scales for geohazards. 2006.
- [6] X.-J. Ma, Z.-Q. Sun, and Y.-Y. He. Analysis and design of fuzzy controller and fuzzy observer. *IEEE Transactions on fuzzy systems*, 6(1):41–51, 1998.
- [7] L. N. Prasad, P. S. Murthy, and C. K. K. Reddy. Analysis of magnitude for earthquake detection using primary waves and secondary waves. In *Human Computer Interactions (ICHCI), 2013 International Conference on*, pages 1–6. IEEE, 2013.
- [8] I. Sakti. Methodology of fuzzy logic with mamdani fuzzy models applied to the microcontroller. In *Information Technology, Computer and Electrical Engineering (ICITACEE), 2014 1st International Conference on*, pages 93–98. IEEE, 2014.
- [9] Suyanto. *Artificial Intelligence*. Informatika Bandung, 2014.
- [10] P. Teja. Seismic response of circuit breakers. *International Journal of Research in Engineering and Technology*, 3:473–477, 2014.
- [11] themeter. Mercalli scale and richter magnitude, 2010.
- [12] H. Zheng, G. Shi, T. Zeng, and B. Li. Wireless earthquake alarm design based on mems accelerometer. In *Consumer Electronics, Communications and Networks (CECNet), 2011 International Conference on*, pages 5481–5484. IEEE, 2011.