

IV. CONCLUSION

The use of Wi-Fi in the POLINES campus area for building search navigation using a smartphone has successfully shown error rates at each test site. The test site is based on the signal strength and prediction of possible use. Of the three scenarios whose test locations were made obtained the average error rate measurement of user location predictions of 7,050 m. So that research can be continued by adding additional transmitters such as iBeacon in areas that are not reached by signals to increase location determination accuracy. The routes the application generates in the shortest route to get to the destination are very dynamic. The user's position on the map would continuously be updated, and the route is constantly updated by following the user's movements. Navigation applications are still recommended to help visitors search buildings in large areas while maintaining the accuracy of information.

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