Geolocation inside large educational institute

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Abstract: The paper presents techniques in locating a person in a large educational Institute with Wi-Fi zone. It is based on measuring signal strength, distance-angle triangulation and location fingerprinting. A signal strength monitoring is the part of standard operation mode of the Wi-Fi equipment, so no custom-build hardware or operating system and device driver modifications are necessary. Signal attenuation due to indoor obstacles is used for calibration purposes. Mapping information is presented in vector formats such as Scalable Vector Graphics since it offers high quality map images suitable for mobile services.