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Electric Vehicle Recharge to Find Nearest Bunk

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Abstract: Transportation electrification is one of the essential components in the future smart city planning and electric vehicles (EVs) will be integrated into the transportation system seamlessly. Charging stations are the main source of energy for EVs and their locations are critical to the accessibility of EVs in a city. They should be carefully situated so that an EV can access a charging station within its driving range and cruise around anywhere in the city upon being recharged. In this paper, we formulate the Electric Vehicle Charging Slot Booking, in which we minimize the charging station queue for EV charging. The proposed system of EV Charging mobile app to provide EV car owner the convenience of locating charging stations on Google map, vacancy of charging slots, getting status updates on charging. Help to easy way of charging of EV station and ensure smooth journeys long distance.

Keywords: EV, Electric Vehicle, RFID, Radio Frequency Identification.

REFERENCES

- S. Chen and L. Tong, "iEMS for large scale charging of electric vehicles: Architecture and optimal online scheduling," in Proceedings of IEEE International Conference on Smart Grid Communications, Tainan City, Taiwan, Nov. 2012.
- [2] N. Chen, T. Q. S. Quek, and C. W. Tan, "Optimal charging of electric vehicles in smart grid: Characterization and valley-filling algorithms," in Proceedings of IEEE International Conference on Smart Grid Communications, Tainan City, Taiwan, Nov. 2012.
- [3] A. Y. S. Lam, L. Huang, A. Silva, and W. Saad, "A multi-layer market for vehicle-to-grid energy trading in the smart grid," inProceedings of 1st IEEE INFOCOM Workshop on Green Networking and Smart Grids, Orlando, FL, Mar. 2012.
- [4] A. Y. S. Lam, K.-C. Leung, and V. O. K. Li, "Capacity management of vehicle-to-grid system for power regulation services," in Proceedings of IEEE International Conference on Smart Grid Communications, Tainan City, Taiwan, Nov. 2012.
- [5] J. J. Q. Yu, V. O. K. Li, and A. Y. S. Lam, "Optimal V2G scheduling of electric vehicles and unit commitment using chemical reaction optimization," in Proceedings of IEEE Congress on Evolutionary Computation, Cancun, Mexico, Jun. 2013.

