FastPlan: A Portable and Automated Framework for Accelerating Disaster Response

Summer 2023

CS 4000: Individual Studies in Computer Science - Public Mapbased Points-of-Interest (POIs) Extraction and Android App development



U.S. Department of Homeland Security (DHS) Summer Research Team (SRT) Program

During my individual studies project, I embarked on the task of extracting data from Google Maps and integrating it into an Android application, an invaluable experience that offered me hands-on learning opportunities. This rewarding journey has significantly enriched my knowledge and expertise in these areas. The combination of practical learning and problem-solving has been instrumental in shaping my technical competencies and enhancing my overall understanding of the intricacies involved in app development and data management.

Throughout my individual studies project, I not only developed a comprehensive database of POI coordinates and types but also seamlessly integrated MATLAB code and the database into the Android application. This integration allowed me to harness the full potential of the Google Maps API while leveraging the analytical capabilities of MATLAB. The project provided valuable insights into data management, architecture design, and app development frameworks. I honed my skills in data analysis, user interface design, and troubleshooting while navigating challenges and implementing effective solutions. This hands-on experience laid a strong foundation for my future pursuits in software development and data management, enhancing my technical competencies and decision-making abilities. As I continue to explore the world of technology, the knowledge gained from this project will serve as a guiding beacon for my academic and professional journey.

I am sincerely thankful to Professor Lim, DHS, and the Center for Accelerating Operational Efficiency (CAOE) team for their unwavering support and guidance during this project. Their expertise and collaboration have been instrumental in its success, enhancing my learning experience and skills. Their commitment to advancing research in critical areas of national security has inspired me to pursue further studies in this field. I am grateful for the opportunities they have provided me, and their contributions have undoubtedly shaped my academic and professional journey in a meaningful way.

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