

Abstract: Client Access Feature Engineering for the Homeless Community of the City of Portland

Given the severity of homelessness in many cities across the country, the project at hand attempts to assist a service provider organization called Central City Concern (CCC) with their mission of providing services to the community of Portland. These services include housing, recovery, health care, and jobs. With many different types of services available through the works of CCC, there exists an abundance of information and data pertaining to the individuals that interact with the CCC service system. The goal of this project is to perform an exploratory analysis and feature engineer the existing datasets CCC has collected over the years in order to reveal some potential interaction patterns between the CCC service system and its clients. This methodology of exploring data is not an uncommon technique and in fact is fairly common and fundamental in any data science related project. Common yet essential, this exploratory analysis is unique by the story that is told through the visualization and feature engineering of the CCC client data. As reported by CCC, there are many responsibilities that CCC must handle thus this analysis was the very first time that the CCC team has seen the information that was explored in this exploratory analysis manner. This project is meaningful in the sense that it provides a different data interpretation perspective via data analysis that the team has not seen before.