OVERVIEW OF STARPLAN-VI RELATED TECHNOLOGIES

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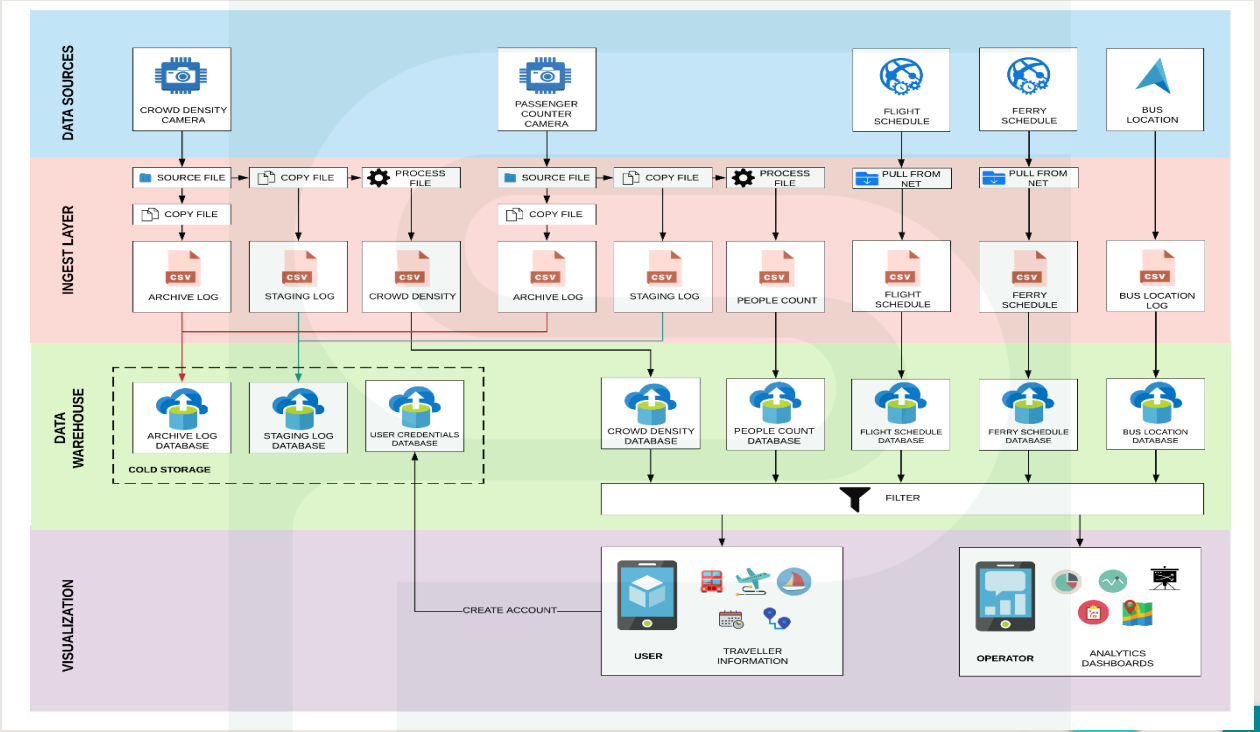
Project Member

BACKGROUND:

- The Sustainable Technology-Assisted Route Planning for Region VI (STARPLAN-VI) project which started in January 2020 was a DOST-PCIEERD-funded project implemented by the researchers from De La Salle University, Manila

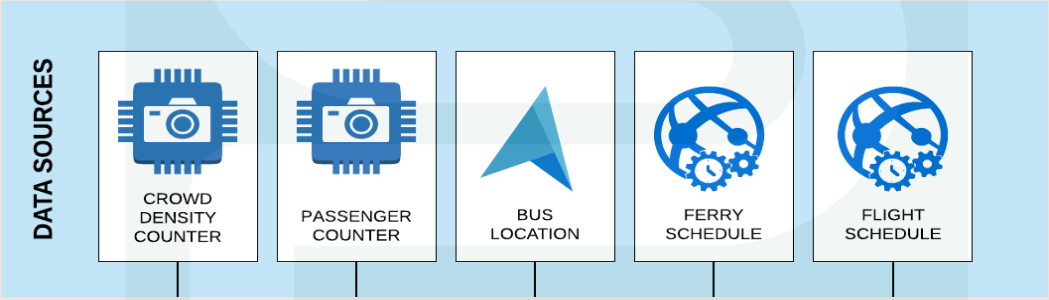
- One of the goal of this project is to develop technologies such as the bus passenger counter using machine vision that gathers necessary data that can be analyzed and display in different platforms to improve the current transportation system.

DATA FLOW ARCHITECTURE:



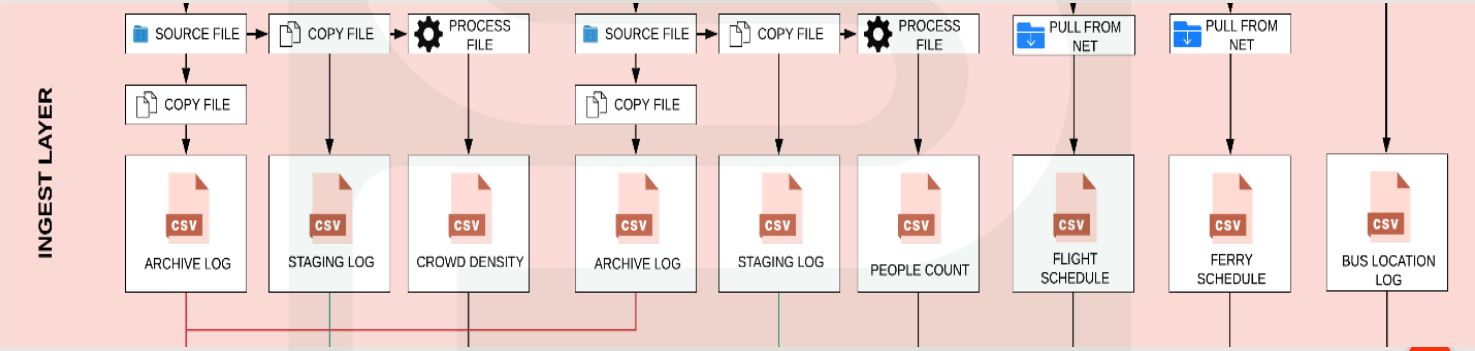
DATA SOURCES

- The primary data sources for this study will include the crowd density for each bus stop, the number of passengers inside the bus, the GPS location of the bus and real-time ferry and flight schedule as seen in figure below.



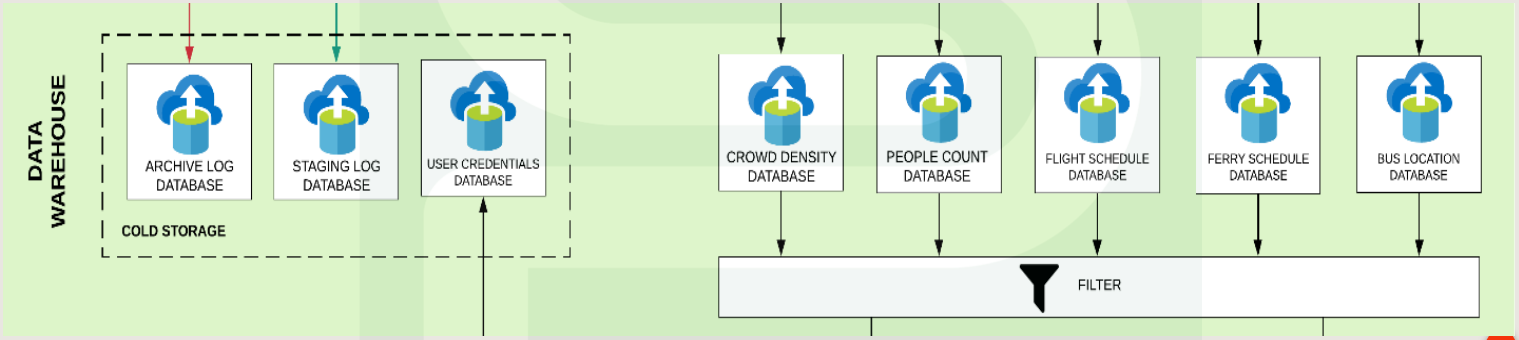
DATA INGEST LAYER

- Data ingestion gathers data and imports it into the data processing systems. This layer process incoming data and routes it to their corresponding location for storage and immediate use.



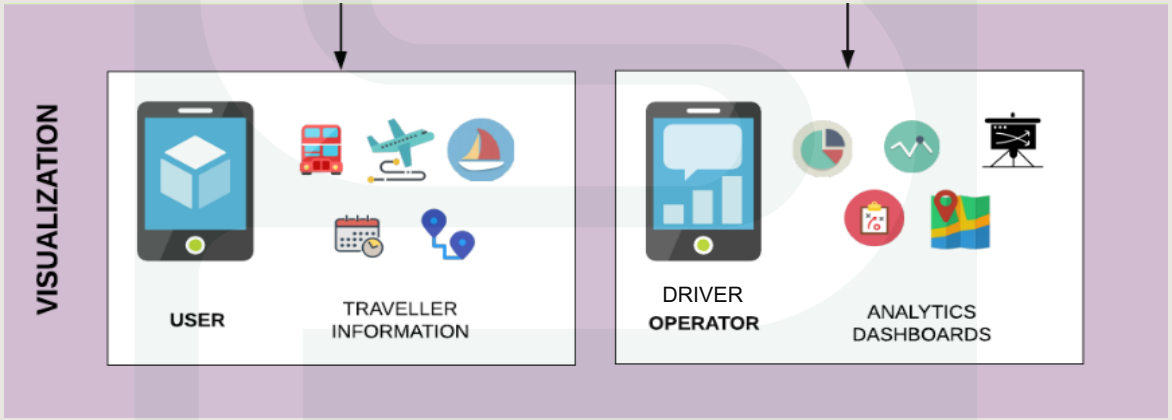
DATA WAREHOUSE LAYER

- The data warehouse is composed of several databases. The entire data warehouse will be integrated to the cloud using commercially available cloud computing services such as Amazon Web Services or Google Cloud Platform.



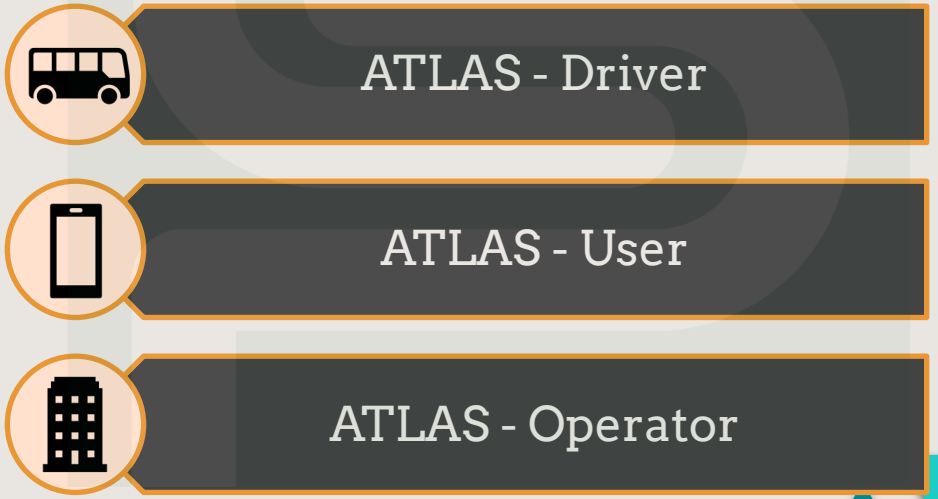
DATA VISUALIZATION LAYER

- The STARPLAN-VI can be accessed through different applications that can be used by passengers, drivers, and operators.

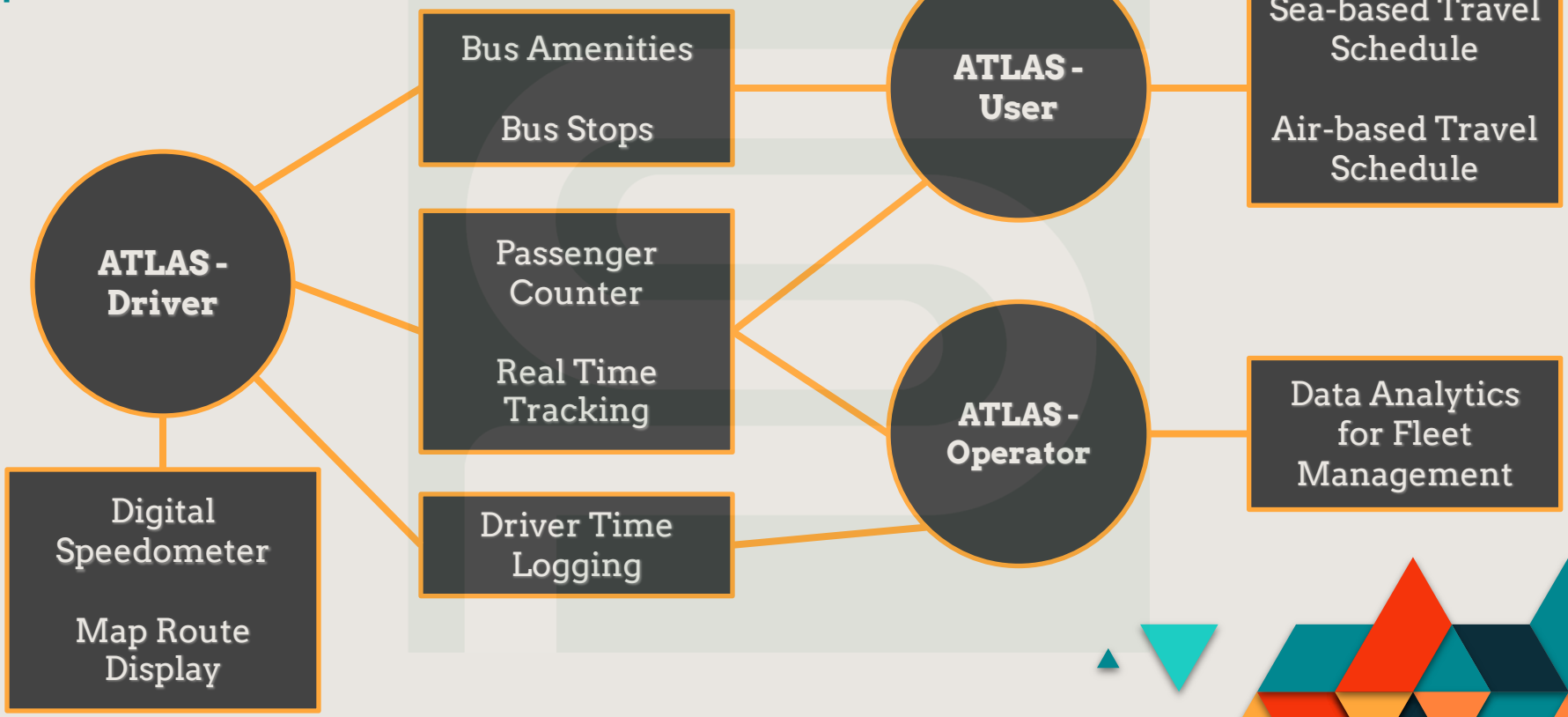


ATLAS: Advanced Traveler Assistance System

- ATLAS is the term used to define all the technologies related in addressing the problem regarding transportation system through computer vision and machine learning. It is subdivided in three parts namely:



ATLAS OVERVIEW



THANK YOU FOR LISTENING!

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