

IMAI LAB.

[Facility Location and Architectural Design]

Department of Human and Social Systems

Architectural Space Systems

Department of Architecture, Faculty of Engineering

Facility Location Using Voronoi diagram with obstacles

We show an approximate solution to Multi-Weber Problems with Barriers. By measuring the shortest-path distances of a random Delaunay network, we provide the method to convert Multi-Weber Problems with Barriers into practical p -median problems on discrete networks. And, we verify that several simple model problems can be solved by this method. Moreover, we solved Automated External Defibrillator's Locations in Komaba II Research Campus of the University of Tokyo, as a sample Multi-Weber Problem with free-shaped obstacles.



Architectural Renovation

The 60th Anniversary Commemorative Hall (tentative)

We propose the renovation plan of the old building No.60, that is located in the Komaba Research campus. The building will be converted into the commemorative hall of IIS. Main programs of the hall are as follows;

- To enhance research spaces for active cross-culture integration and industry-university joint research
- To provide a home for our archives and an 3D virtual reality theater for presenting advanced technologies developed in the past and those under development at present
- To organize and store research and development records dating back to the Second Faculty of Engineering, and exhibit them to the public
- To set up a communication space for alumni of IIS and the Second Faculty of Engineering, members of IIS Alumni Association and IIS Friendship Society and researchers and engineers who gather at IIS

Improvement of AED Locations (above) present AED locations (below)



Perspectives after the renovation