Spacial Optimization: A Study in Theme Park Design

Zachary Balgeman
Valparaiso University, zachary.balgeman@valpo.edu

Follow this and additional works at: https://scholar.valpo.edu/cus
Part of the Electrical and Computer Engineering Commons

Recommended Citation
https://scholar.valpo.edu/cus/233
**Spacial Optimization: A Study in Theme Park Design**

Zachary Balgeman

*Departmental Affiliation:* Electrical and Computer Engineering  
*College of Engineering*

Optimization is carefully considered when a company begins to design a theme park. The company wants to maximize their profits while still meeting the consumers’ expectations. One of the things that must be kept in mind throughout the optimization process is space management. With a fixed space budget, only a finite amount of land is available for different park components (including attractions, shops, restaurants, and open areas). We have been studying the allocation of these areas in the Walt Disney World Magic Kingdom. From this, we want to develop a model for an amusement park in an urban environment.

*Information about the Author:*
Zachary Balgeman has liked Disney since early childhood. During high school, he decided to pursue being a theme park designer. He is very passionate about this project and learning how to optimize space in a theme park.

*Faculty Sponsor: Dr. Mark Budnik*

*Student Contact:* zachary.balgeman@valpo.edu