Abstract

A train movement approach proposed in this paper which is based on calculated "times of train spent on railway until access to next station" by applying several strategies to solve problem for a railway such as (priority, parallel) strategy. Also the aim is to reduce waiting time for trains during transition from station to next stations. In this paper depended a best algorithm called discrete probability distributed to simulate operations for train through moving on railway, such as access time, waiting time, leave time, etc. also concluded double directions is best than single direction because its prevent conflict with other trains and not required waiting time.

References

- Gabriele Malavasi, "Petri Net Tools for Simulation of Railway Operation", University of Rome La Sapienza DITS - Transport Area, Via Eudossiana, 18 - 00184 - Roma Italy, E-Mail: gabriele.malavasi@uniroma1, stefano.ricci@uniroma1, 2000.
- Ting Li, Freek Hofker, "Passenger Travel Behavior Model in Railway Network Simulation"; RSM Erasmus University, P. O. Box 1738, Rotterdam, the Netherlands, 2006.
- Y. Bavafa-Toosi, "Modeling, Analysis, Synthesis, and Simulation of Time-Optimal Train Traffic in Large Networks"; 2/71, Abuzar 11 St, Ahmadabad Ave, Mashhad 9176885464, Iran, Email: ybavafat@yahoo.com, 2008.
- J. Manuel Feliz-Teixeira, "Circles Model for Metro Light Rail Analysis"; Email: feliz@fe.up.pt, url: http://geinsrv.fe.up.pt/feliz, 2007.

**Index Terms**

Computer Science

Information Sciences

**Keywords**

Train railway simulation station single-direction double-direction.