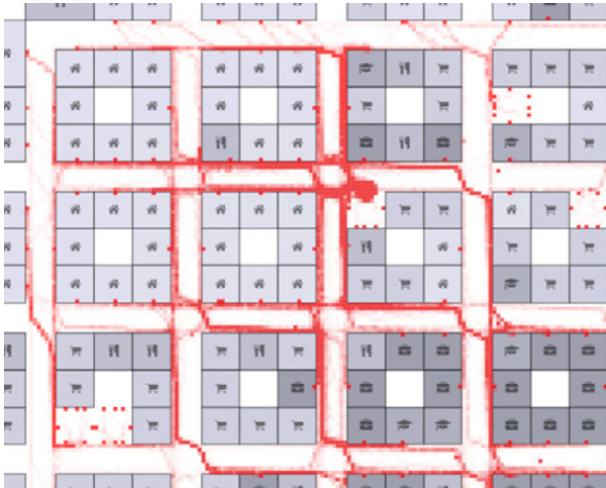


Procedural Crowd Generation for Semantically Augmented Virtual Cities

Rogla, Otger; Patow, Gustavo A.; Pelechano, Nuria



Authoring meaningful crowds to populate a virtual city can be a cumbersome, time-consuming and an error-prone task. In this work, we present a new framework for authoring populated environments in an easier and faster way, by relying on the use of procedural techniques. Our framework consists of the procedural generation of semantically-augmented virtual cities to drive the procedural generation and simulation of crowds. The main novelty lies in the generation of agendas for each individual inhabitant (alone or as part of a family) by using a rule-based grammar that combines city semantics with the autonomous persons'™

characteristics. A new population or city can be authored by editing rule files with the flexibility of reusing, combining or extending the rules of previous populations. The results show how logical and consistent sequences of whereabouts can be easily generated for a crowd providing a good starting point to bring virtual cities to life.