Machine-Assisted Extraction of Formal Semantics from Domain Specific Semi-Formal Diagrams

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Abstract

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1 Introduction

Significance

2 Related Work

2.1 Generating Formal Meaning from Informal Diagrams

3 AMIDOL

3.1 Visual Domain Specific Languages

3.2 Intermediate Representation

3.3 Inference Engine

4 Compartmental Model for Epidemiology

4.1 SIRS Model

H1N1 R_0 importance [3].

Ebola R_0 importance [2]

CDC Data [1]

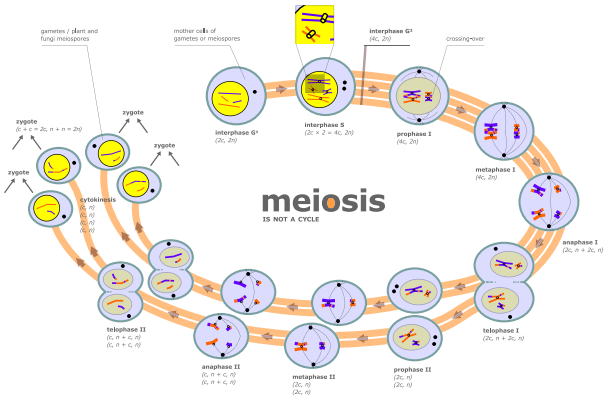

Figure 1: Example of a semi-formal diagram of Meoisis.[2]

[2]CC-BY-SA 3.0 Marek Kultys, July 2, 2008.

4.2 Vital Dynamics

5 Conclusions

6 Future Work

7 Acknowledgments

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8 Resources, web sites, etc.

MWS seeks to build a community and share resources, so feel free to have a section in your paper that points readers to web sites, github pages, etc.

References

[1] CDC. National, regional, and state level outpatient illness and viral surveillance. https://www.cdc.gov/flu/weekly/fluactivitysurv.htm. Accessed: January 2019.

[2] David Fisman, Edwin Khoo, and Ashleigh Tuite. Early epidemic dynamics of the west african 2014 ebola outbreak: estimates derived with a simple two-parameter model. *PLoS currents*, 6, 2014.

[3] Christophe Fraser, Christl A Donnelly, Simon Cauchemez, William P Hanage, Maria D Van Kerkhove, T Déirdre Hollingsworth, Jamie Griffin, Rebecca F Baggaley, Helen E Jenkins, Emily J Lyons, et al. Pandemic potential of a strain of influenza a (h1n1): early findings. *science*, 2009.