TKI visual analytics for plant pangenomes

VLPB

5-10-2020, Sandra Smit







A bit of history...





June 2018

TKI proposal submitted



Oct 2018

Proposal awarded

May 2019

Project agreement

Feb 2020

PhD candidate found

Aug 2020

PhD position started





One hour of visual analytics

- Sandra
 - Mission
 - Vision
- Astrid
 - Strategy
- Michel
 - Expectation management







Mission

Team Visual Analytics for Plant Pangenomes



Astrid van den Brandt

- Promovendus
- TU Eindhoven



Michel Westenberg

- Promotor
- TU Eindhoven



Sandra Smit

- Co-promotor
- Wageningen University



Bernard de Geus

- VLPB
- Coordinator





- Co-supervisor
- TU Eindhoven







Mission

9 VLPB partners

















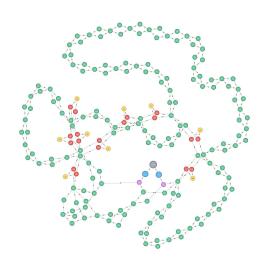






Mission

To empower plant breeding by designing visual analytics solutions for plant pangenomes











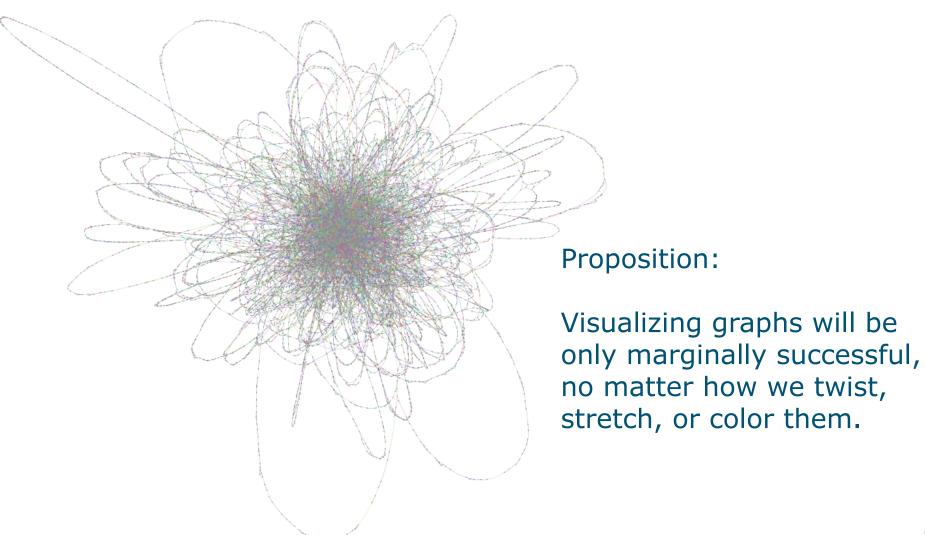
Vision

- 18-month partnership with VLPB
- Develop a visual analytics toolkit for large crop pangenomes, as constructed by PanTools
 - Design study
 - Two use cases
- Deliverables
 - Prototype implementation with novel visualizations for plant pangenomes
 - Open source software, extension to PanTools





Vision



Smart visualization

- Need dashboard-like system to browse pangenomes
 - Control panel
 - Graph view for big picture or navigation, but not interpretation
 - Translated, informative, views





Resources

- People
- Time



- 17-8-2020 =>17-2-2022 (18 month partnership)
- 17-8-2020 => 17-8-2024 (PhD position)
- Money
 - Company contribution
 - 30K in kind -> software testing
 - 30K in cash
 - TKI public funding: 60K in cash





Coming up

- Strategy
 - Design study
 - Use cases
 - Prototypes
- Timeline
- Communication
- Expectations and examples



