

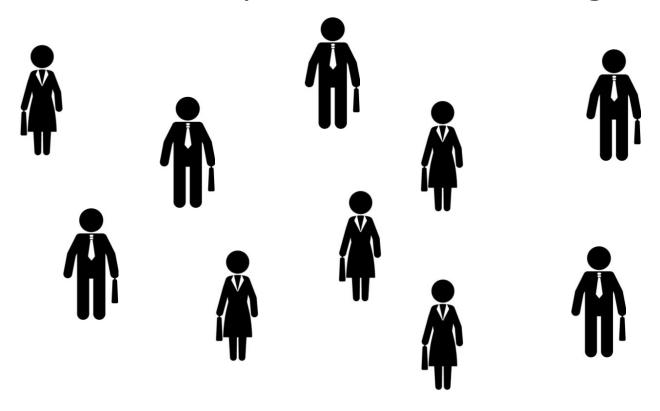
FastMatch:

Pairing Algorithm for people to extend professional network

Jiong Zhang Insight Data Science

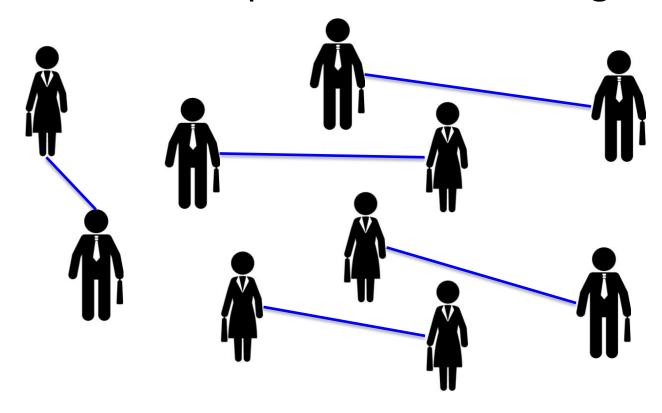
Weave Concierge

matches users for professional meetings



Weave Concierge

matches users for professional meetings



Weave Concierge

matches users for professional meetings



Weave Concierge

matches users for professional meetings



Goal: Develop a Pairing Algorithm to Maximize a Good Meeting

The deliverable for Weave

Manually matching good meetings: 85%





good meetings: 96%





The data workflow







profile

Available data:

title,
education,
gender,
looking_for,
meeting
history

Feature calculation

labels

Meeting feedbacks (ratings=

1, 2, 3, 4, 5)



features

Meeting features (Combined user features)

The model training and evaluation

10-fold cross-validation on training set

Feature selection

Model parameters optimization

Model selection
(Random forests;
logistic regression;
k neighbors)

Model evaluation on testing set

Best model: Random forests

67% predictions obtain actual rating **95%** predictions obtain rating +/- 1 RMSD: 0.75

The insights for Weave

Weave is implementing this algorithm



Automated matching maximizes good meetings



Recommendation engine

matches people from different cities during their visits



Jiong Zhang (





Ph.D. in Theoretical and Computational Biological Physics Dissertation: Theoretical and computational studies on bio-molecular systems: structures and dynamics