List of files for *A Field Study on Matching with Network Externalities*

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The following scripts require the programs *Mathematica*, *MATLAB*, and *Stata*. The preferred run sequence is:

1. *RunPaperStats.do*

2. *RunMatlab.m*

3. *OfficeMathematica.nb*

The first two analysis files above may also require some brief modifications in the first lines of the scripts to set-up the local folder installation correctly.

1   Data Files

OfficeN.dta: main *Stata* data file. Each row corresponds to an office-faculty pair.

network_matrix.dta: data describing network links between faculty. Each row references the network interaction between the faculty in offices i and j at the end of the serial-dictator process. Used by *Stata* script *RunPaperStats.do*.

OfficeM.mat: main *MATLAB* data file for *MATLAB* scripts. Exported version of *OfficeN.dta* with additional variables. Used by the *MATLAB* script *RunMatlab.m*.

FacultyChar.dta: faculty characteristics for use in *Stata* do files. Each row corresponds to a specific faculty member.

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2 Analysis Files

RunPaperStats.do: *Stata* analysis script. Replicates the results pertaining to Tables 1, 2, and 3.

RunMatlab.m: *MATLAB* analysis script. Generates matrices for *Mathematica*, and runs the dartboard estimation and the QAP ants algorithm. Replicates results in Table 4 and the welfare improvement results provided in Section 6.

OfficeMathematica.nb: *Mathematica* analysis notebook. Contains all code needed to replicate Tables 5 and 6 from the paper. Note that this notebook requires the user to first run *RunMatlab.m* to generate additional network data files.

3 Function Files

antcycleQAP.m: adaptable function for finding lower bound solutions for the QAP using an ant colony algorithm. Used within the *RunMatlab.m* script. *MATLAB*

AssessLogitAssign.m: function for estimating logit specification on serial-dictator data. Used within the *RunMatlab.m* script. *MATLAB*

CharacteristicCount.m: utility for finding counts of the network variables within some proximity under an arbitrary assignment. Used within the *RunMatlab.m* script. *MATLAB*

fillcompareLex.m: simulates an assignment using a lexicographic specification, with random determination of ties. Used within the *RunMatlab.m* script. *MATLAB*

importfile.m: file import utility for *csv*-type files. Used within the *RunMatlab.m* script. *MATLAB*

MatchEstimation/MatchEstimation.m: modified version of Santiago and Fox (2008) match estimation toolkit. Adds additional functionality for group restrictions on pairwise-stability estimation, and triples estimation tools. Used within the *OfficeMathematica.nb* notebook. *Mathematica*

MfxLogit.m: marginal-effects calculation for logit function. Used within the *RunMatlab.m* script. *MATLAB*

SimulateAssign.m: function for simulating office assignments using a logistic specification. Used within the *RunMatlab.m* script. *MATLAB*