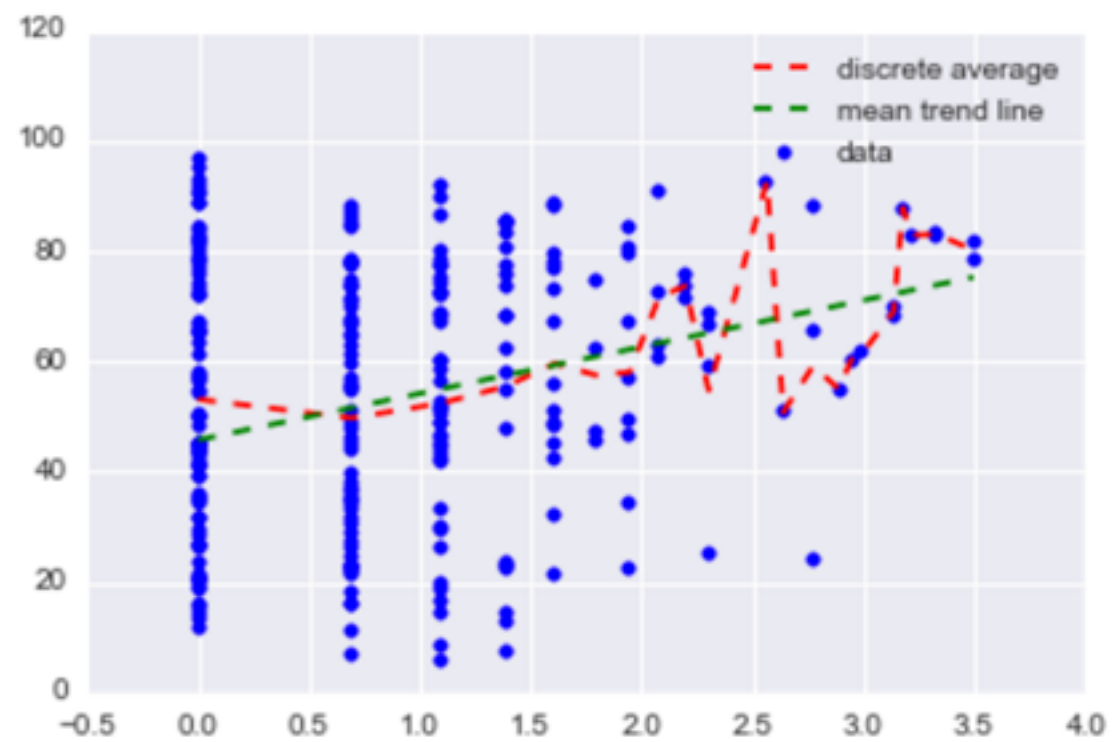
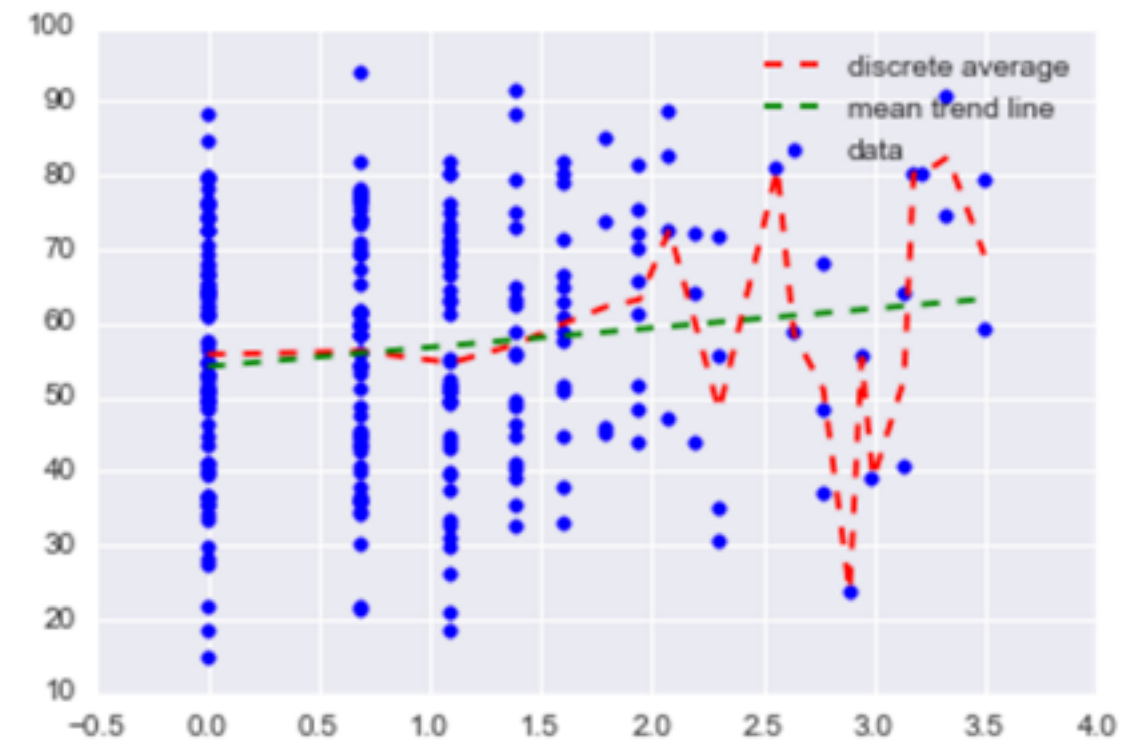


“human” skills



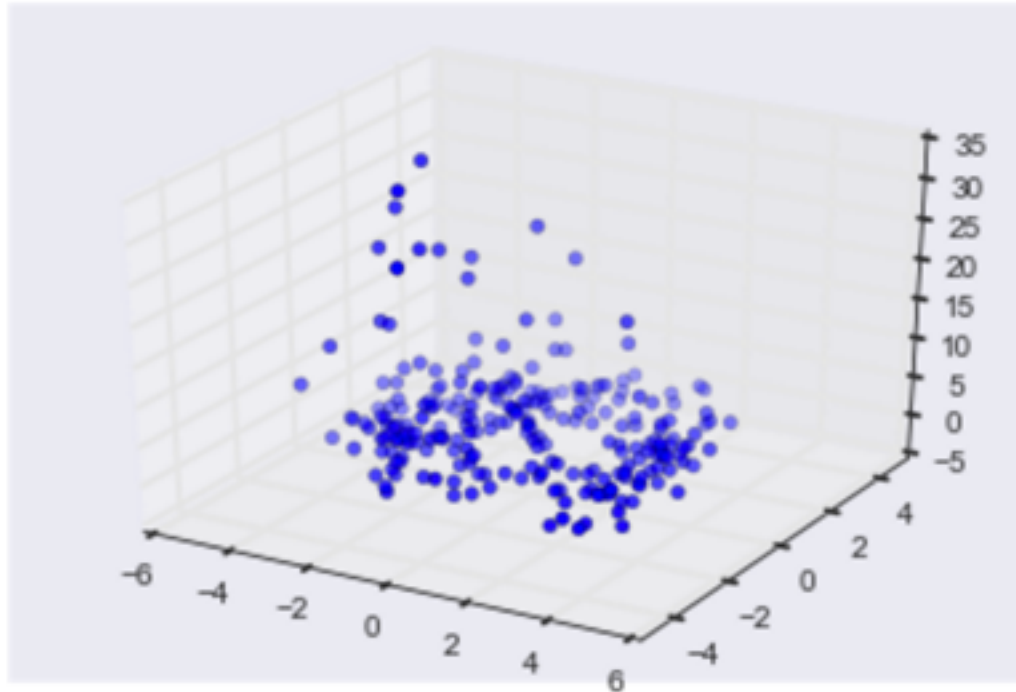
of technologies

“non-human” skills



of technologies adopted

avg. pctile



```
np.corrcoef(xs, zs)
```

```
array([[ 1.          , -0.26354499],
       [-0.26354499,  1.          ]])
```

```
[('Active Learning', -0.16453041112612343),
 ('Active Listening', -0.15818020379911102),
 ('Complex Problem Solving', -0.13032773705632167),
 ('Coordination', -0.10135031411587457),
 ('Critical Thinking', -0.1341933504157819),
 ('Equipment Maintenance', 0.29949089724971489),
 ('Equipment Selection', 0.22469337961529628),
 ('Installation', 0.10874503593085864),
 ('Instructing', -0.16545612545516808),
 ('Judgment and Decision Making', -0.12881112447890672),
 ('Learning Strategies', -0.16513104605175127),
 ('Management of Financial Resources', -0.088479996126442736),
 ('Management of Material Resources', -0.052049005237467479),
 ('Management of Personnel Resources', -0.12377478031172724),
 ('Mathematics', -0.10495496153917258),
 ('Monitoring', -0.077042401272286579),
 ('Negotiation', -0.14908893730334699),
 ('Operation Monitoring', 0.23087982222343484),
 ('Operation and Control', 0.30153482660219294),
 ('Operations Analysis', -0.12957874006711029),
 ('Persuasion', -0.15674794356113575),
 ('Programming', -0.071249234331635602),
 ('Quality Control Analysis', 0.18044793374417784),
 ('Reading Comprehension', -0.19326983326148431),
 ('Repairing', 0.29358581240905041),
 ('Science', -0.14675290565090782),
 ('Service Orientation', -0.14120588606795137),
 ('Social Perceptiveness', -0.13916675718922086),
 ('Speaking', -0.17718503998206783),
 ('Systems Analysis', -0.16659832683680106),
 ('Systems Evaluation', -0.16122695563416803),
 ('Technology Design', -0.017596612312372625),
 ('Time Management', -0.088611028383860743),
 ('Troubleshooting', 0.25557446381825644),
 ('Writing', -0.21937161328203528)]
```

General conclusions:

- Skills are separable
- Technology adoption is not “strict”
- Sparse data is a poor predictor

```
[('Active Learning', -0.16453041112612343),
 ('Active Listening', -0.15818020379911102),
 ('Complex Problem Solving', -0.13032773705632167),
 ('Coordination', -0.10135031411587457),
 ('Critical Thinking', -0.1341933504157819),
 ('Equipment Maintenance', 0.29949089724971489),
 ('Equipment Selection', 0.22469337961529628),
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 ('Judgment and Decision Making', -0.12881112447890672),
 ('Learning Strategies', -0.16513104605175127),
 ('Management of Financial Resources', -0.088479996126442736),
 ('Management of Material Resources', -0.052049005237467479),
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 ('Mathematics', -0.10495496153917258),
 ('Monitoring', -0.077042401272286579),
 ('Negotiation', -0.14908893730334699),
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 ('Time Management', -0.088611028383860743),
 ('Troubleshooting', 0.25557446381825644),
 ('Writing', -0.21937161328203528)]
```