

Occupational Skills Mapping for 24/7 AI Career Cyber-coaching

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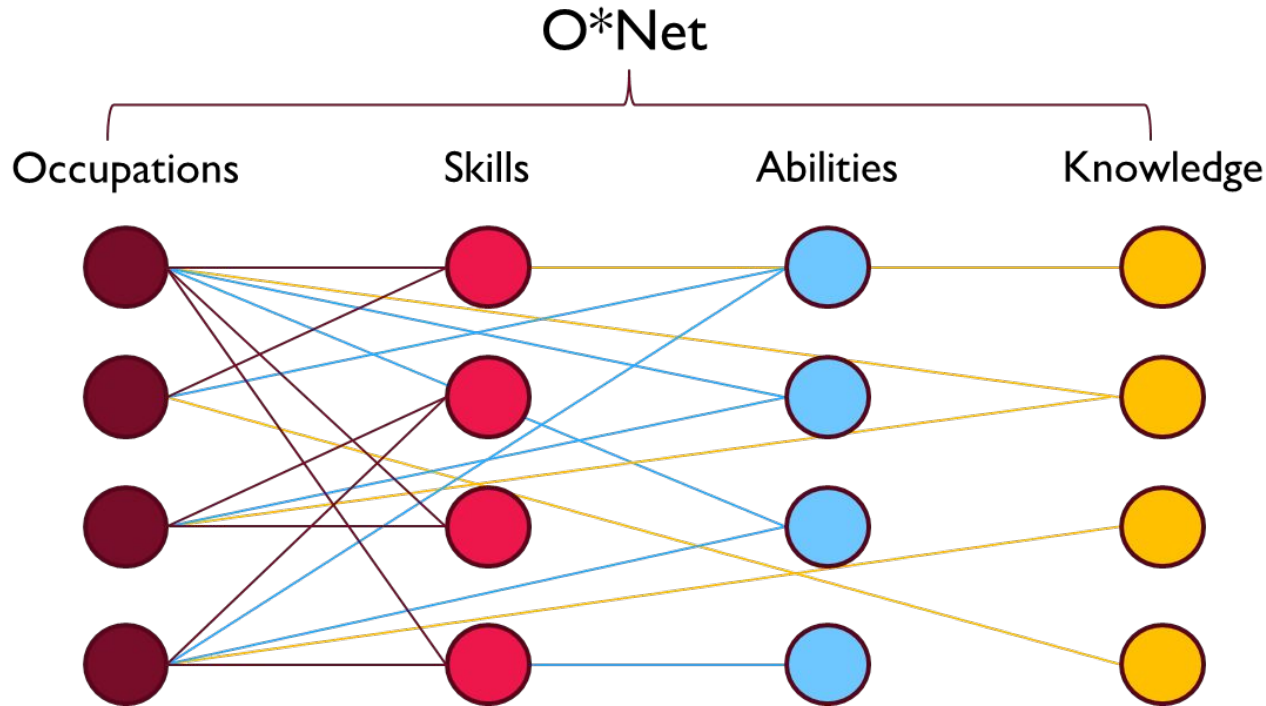
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Goals

- Workers, career coaches, and employment agencies need actionable insights on the evolving labor market
 - Global understanding of occupations and skills outlooks, employment risks
 - Local, actionable data and resources
- Develop occupation and skills maps that can be used as part of career counseling services to guide workers in response to regional and national labor market trends, supply chain issues, or pandemics.
- Focus on strategic areas of needs such as
 - Microelectronic and packaging engineering, embedded systems/system on a chip (soc), supply chains.



Occupation and skills network analysis



BLS

Statistics

Employment Totals

- Current
- 10 year projections

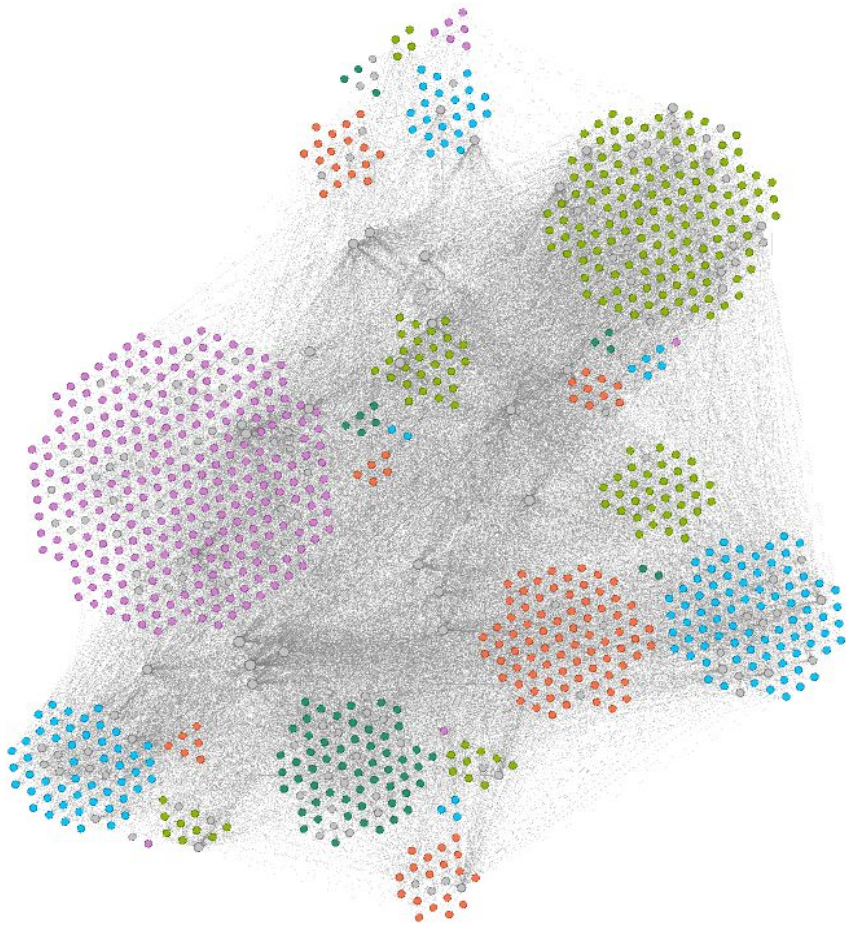
Mean wages

- Hourly
- Annual

Industry Profiles



O*Net Occupation and Skills Bi-Modal Network

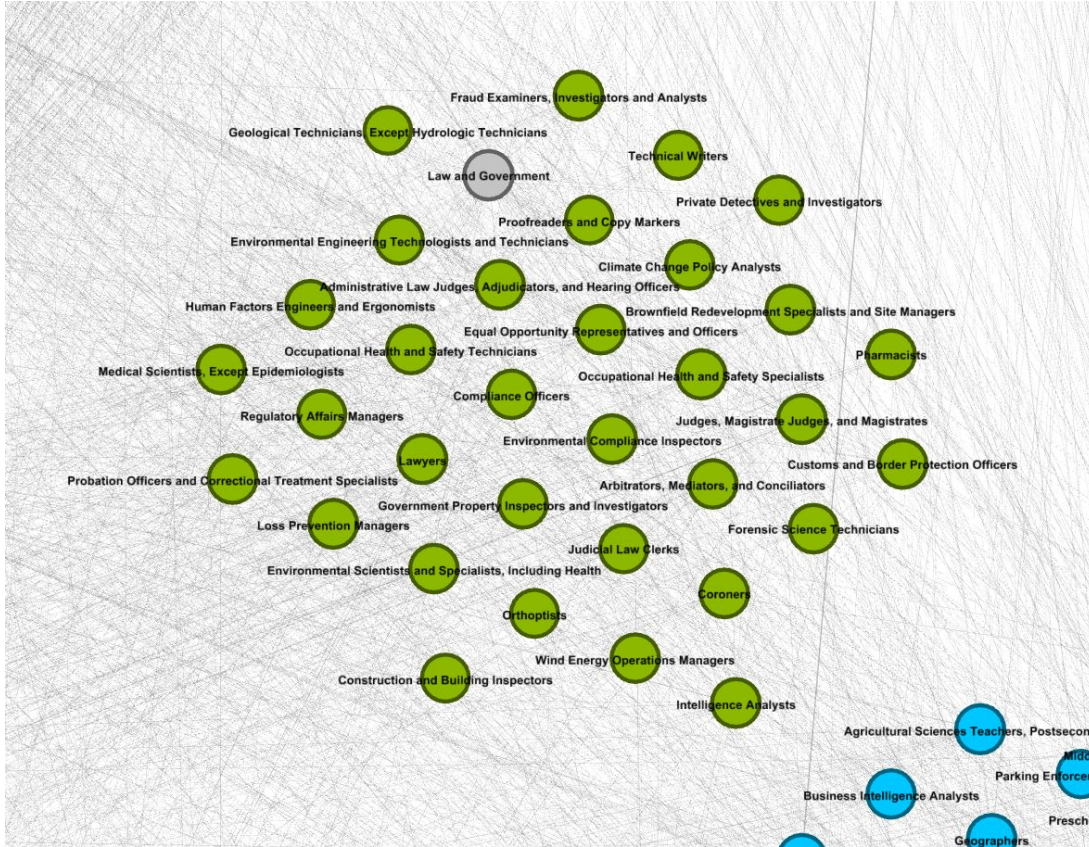


Circle pack layout based on two clustering algorithms.

- Blondel Community Detection Modularity Algorithm
- Spin Glass Community Detection Algorithm
- Filtered to include only high value weights

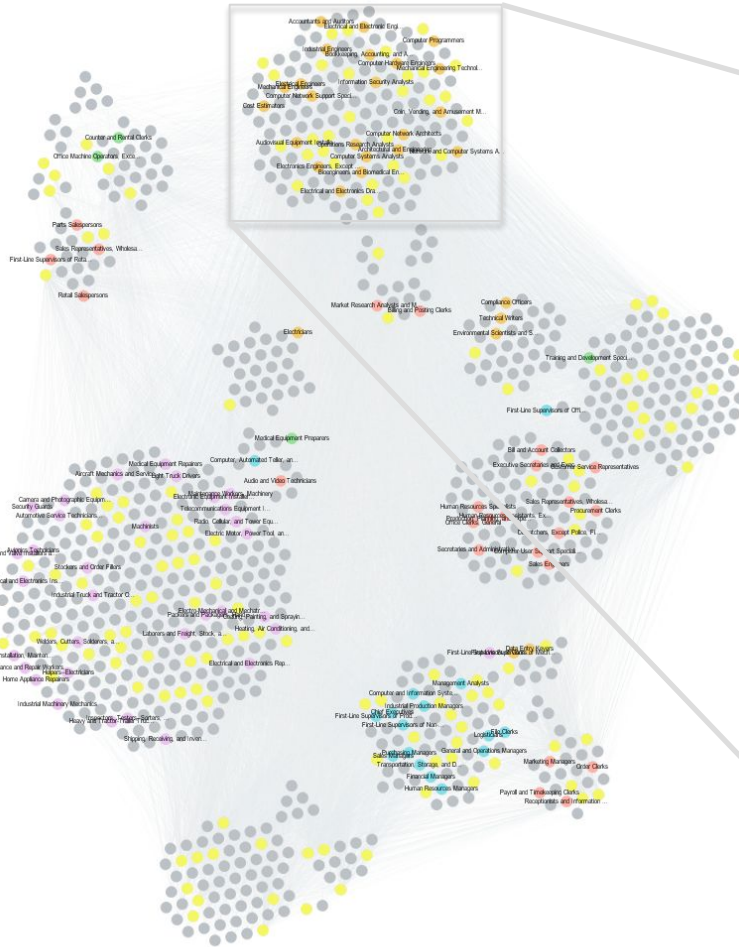
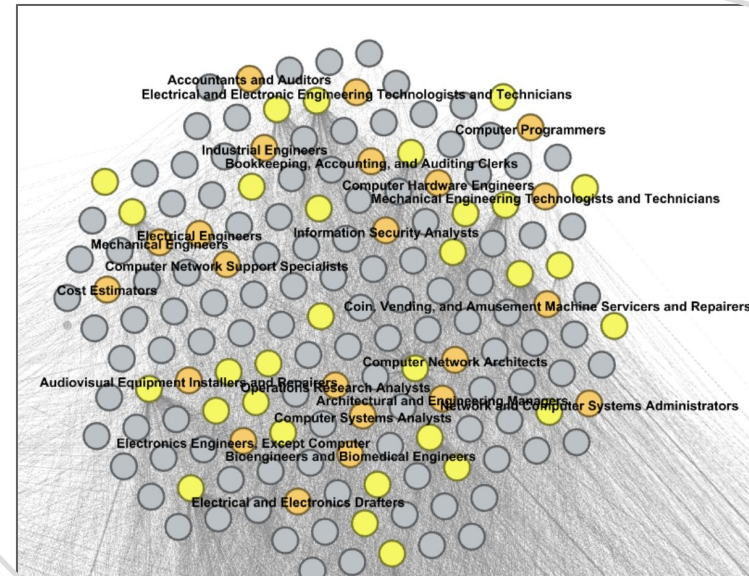


Example Cluster



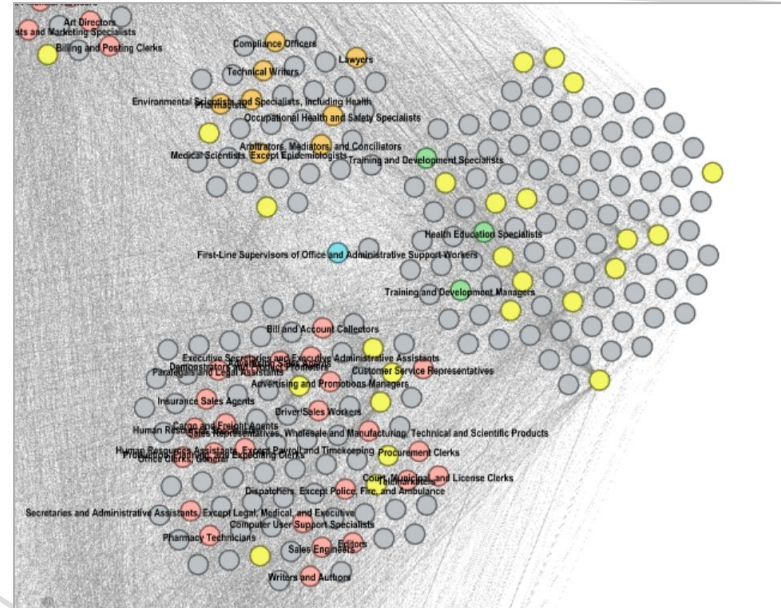
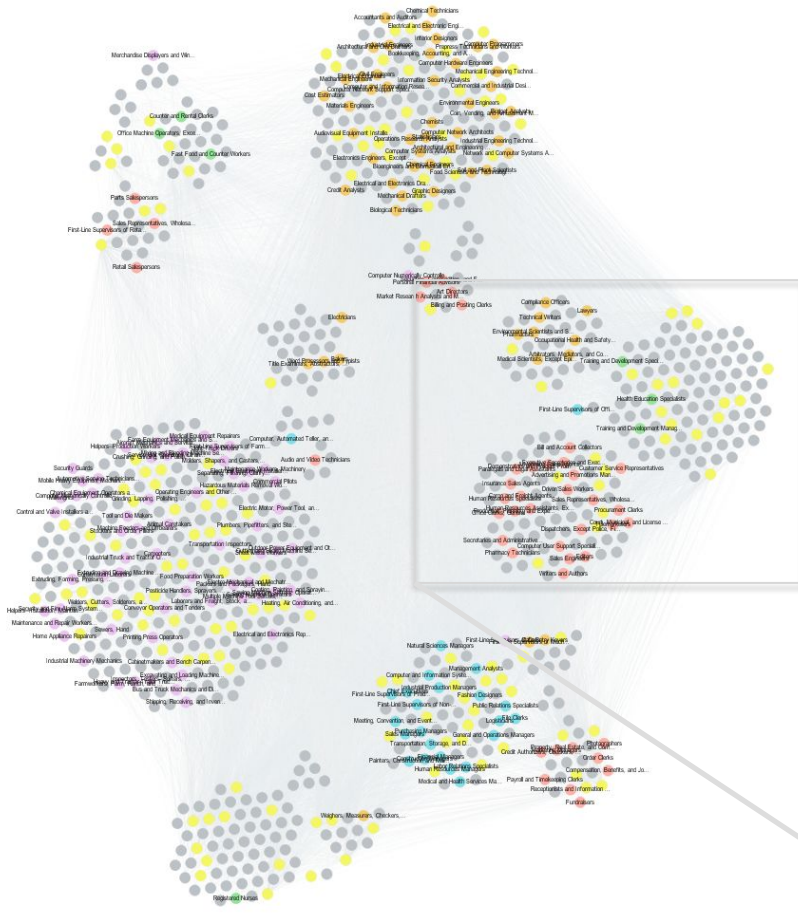
Industry Projections

Electronic and Precision Equipment Repair and Maintenance



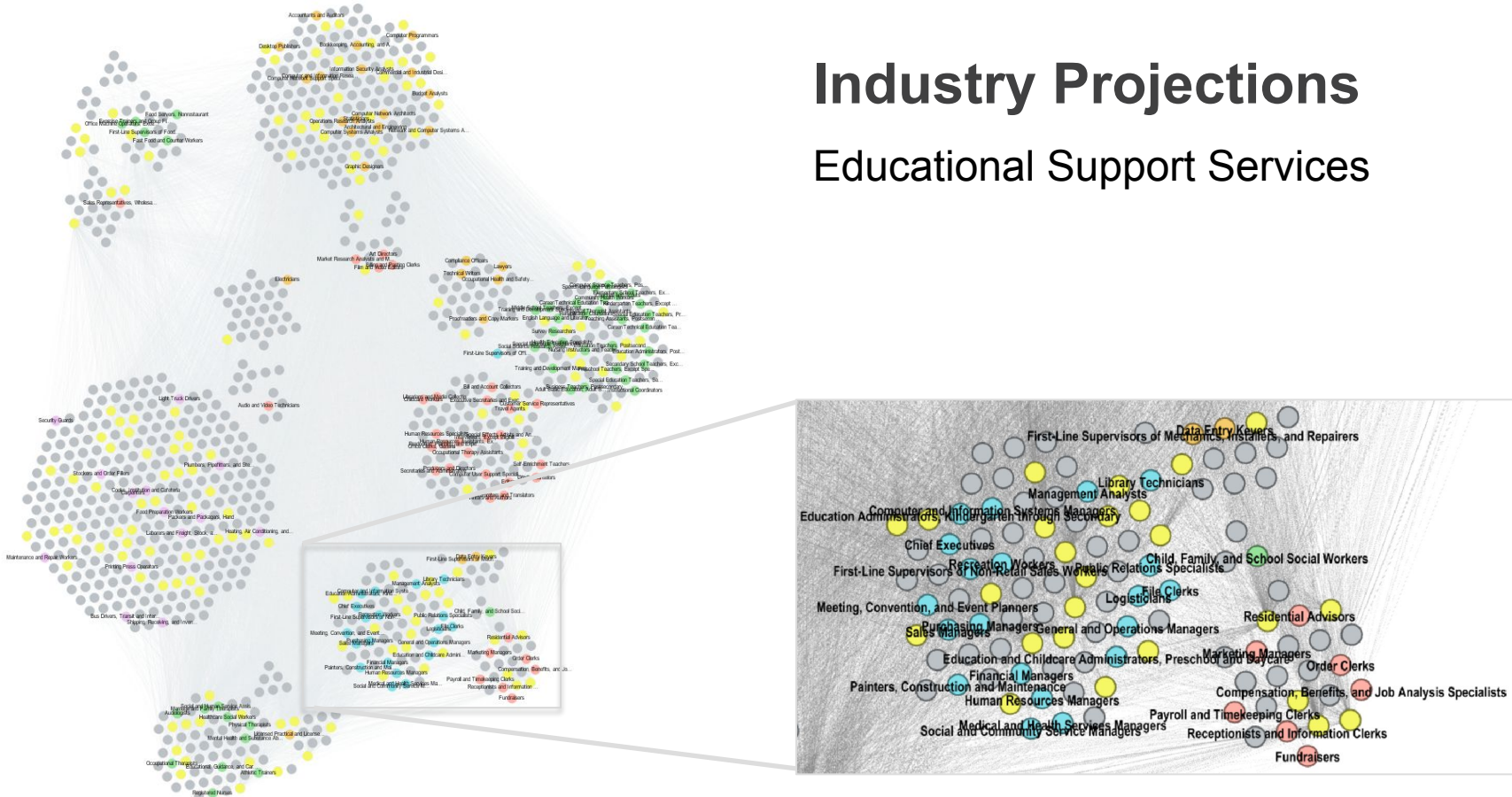
Industry Projections

Wholesale Electronic Markets and Agents and Brokers



Industry Projections

Educational Support Services





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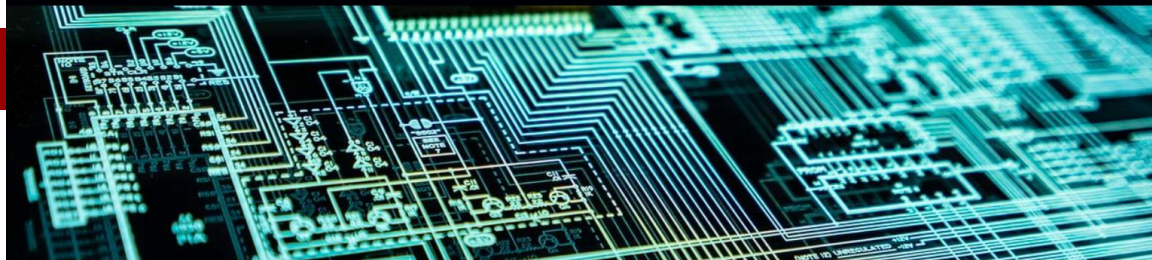
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The Future of Learning & Work Workshop

Open Digital Future. Perspectives on data at the intersection of education and job markets.
Toward a new role of visual and learning analytics.

Date

March 14-15, 2022

<https://cns-iu.github.io/workshops/2022-03-14-futurium/>



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