

Career Compass: Visual Analytics for AI-Powered Career Preparation

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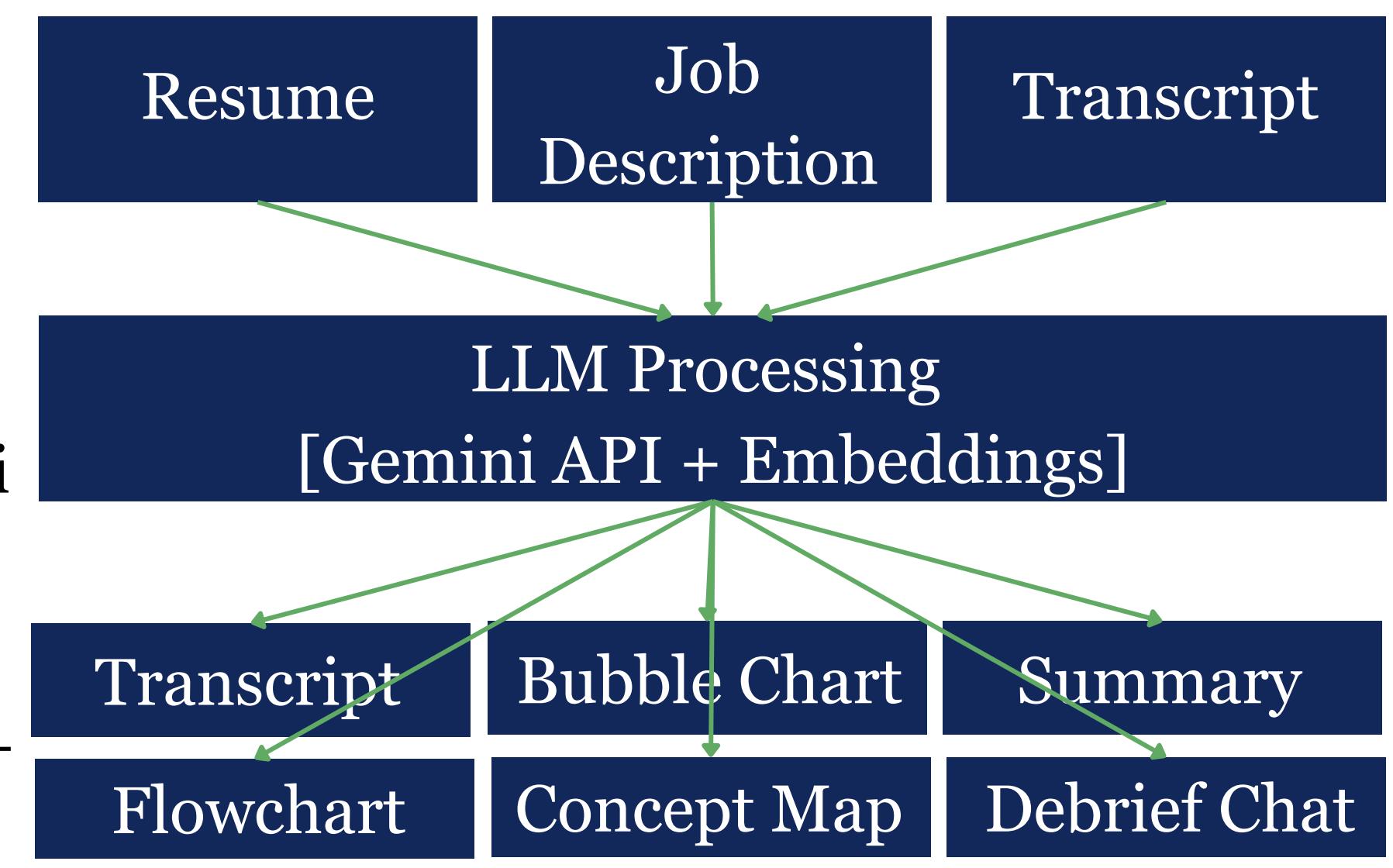
MOTIVATION

- Job hunting = stressful, fragmented, opaque.
- Existing tools → generic scores, no real reflection.
- Students need evidence-based, interpretable feedback to build confidence.

Career Compass unifies interview practice with transcript-grounded visual feedback.

SYSTEM OVERVIEW

- **Data in:** Resume + Job Description + Mock Interview.
- **Processing:** Large Language Model (Gemini API) + embeddings.
- **Data out:** Transcript-anchored visualizations + coaching feedback.



REFLECTIVE AI DESIGN PRINCIPLES

- **Productive Struggle** → Challenge sparks reflection.
- **Adaptive Realism** → Context-sensitive interviews.
- **Workflow Cohesion** → End-to-end integration.
- **Motivational Visualization** → Visuals build confidence.
- **Structured Complementarity** → Pair exploration with rubrics.

KEY FEATURES

1. Adaptive Mock Interviews [2]

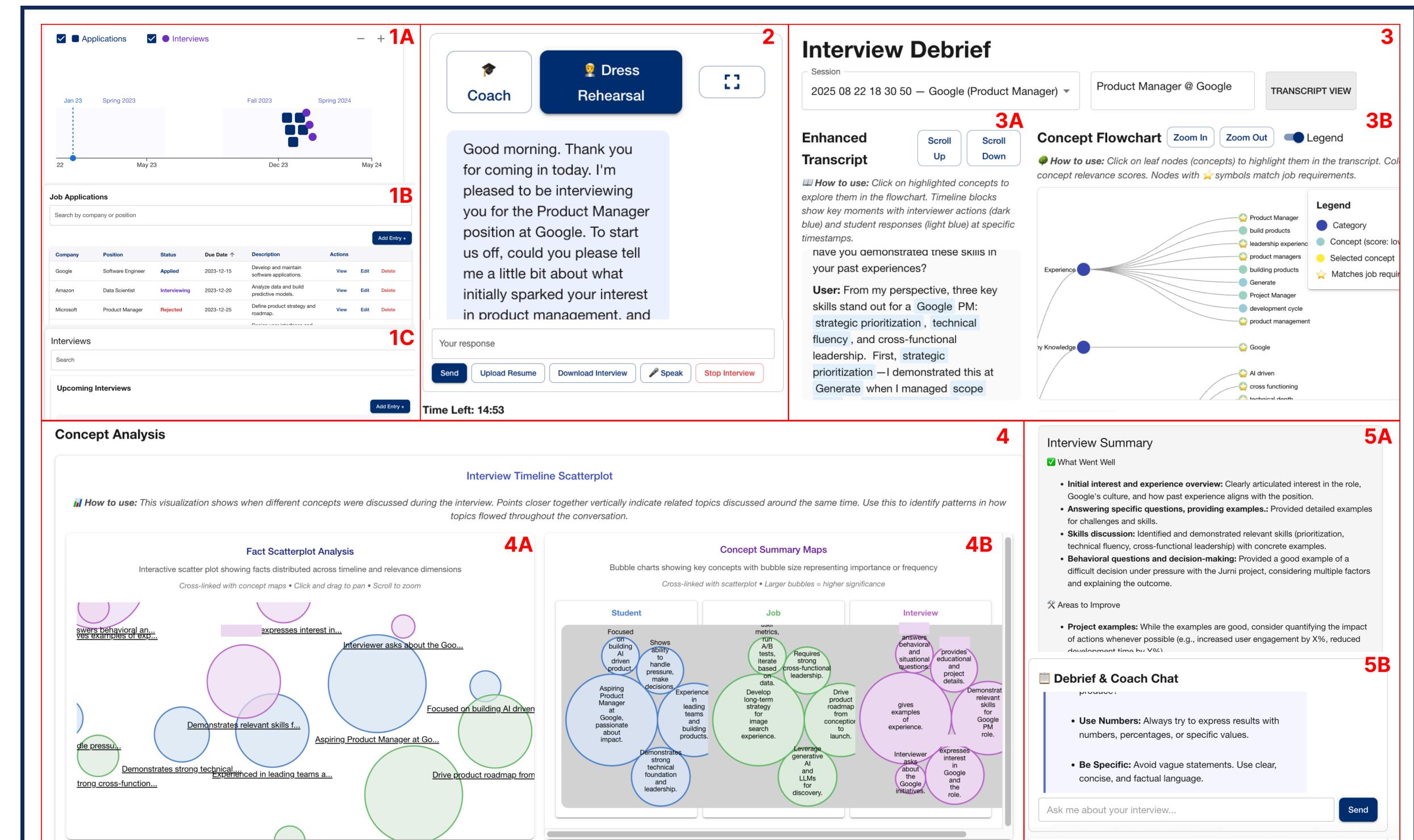
- Coach Mode → supportive practice.
- Dress Rehearsal → realistic high-pressure.

2. Evidence-Linked Visualizations

- Transcript highlights → concepts + strengths. [3A]
- Flowcharts → thematic progression. [3B]
- Bubble charts → resume, job, interview alignment. [4]

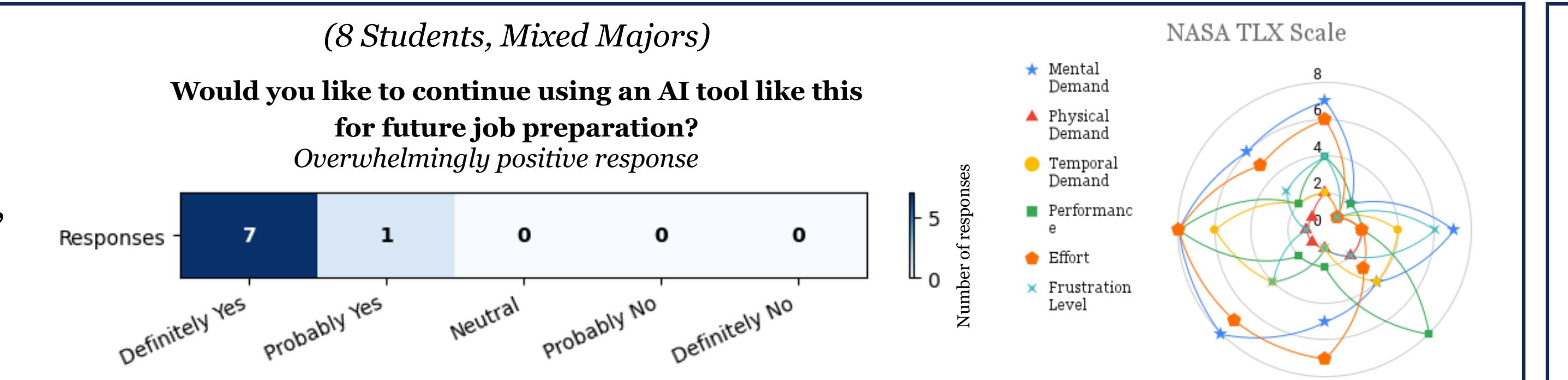
3. Reflective Coaching [5A + 5B]

- Chat with AI coach after interviews.
- Suggestions grounded in your transcript.
- Visuals update live with your revisions.



EVALUATION

- **Realism:** 7/8 → “Extremely realistic.”
- **Satisfaction:** Avg 4.75/5.
- **Adoption:** 7/8 “Definitely would use again.”
- **Workload:** Moderate effort, low frustration → productive struggle.



TAKEAWAYS

- Transforms unstructured interviews into interpretable data.
- Bridges AI and visualization for reflective job prep.
- Generalizable to other high-stakes learning (healthcare, public speaking).

“I would definitely use this again before an interview.” | “The charts showed me exactly where I was strong and weak.”

Acknowledgments: Supported by the Department of Computer Science at Brandeis University, with thanks to our participants for their contributions.

https://linktr.ee/career_compass_ness

