Job Search Strategy

Name: Manoj Harridoss
Date: December 5, 2025

1) SMART Career Goals (3–4)

1 **Summer-2026 ML/NLP/RL Internship**
Apply to 20+ roles and secure at least 4 interviews by **March 15, 2026**; get an offer by **May 1, 2026**.
Why: aligns with my MS→PhD plan and my interests in NLP/RL/safe MARL.

2 **Publish 1 research paper**
Submit a first-author paper on hallucination reduction or safe MARL by **May 31, 2026** (target: ACL/NeurIPS/ICLR workshop).
Milestones: draft by **Feb 28**, internal reviews by **Mar 31**.

3 **MS → PhD conversion at Northeastern (Fall 2026)**
Meet all requirements and secure faculty support (Prof. Byron Wallace / Prof. Christopher Amato) by **June 30, 2026**.

4 **Portfolio polish**
Ship v1 of my "Virtual Calendar" app and the AI mock-interview project with clean READMEs, demos, and tests by **Jan 31, 2026**.

2) Top Skills & Strengths (with brief examples)

Top 5 Skills
- Algorithms & Data Structures (C++) — TA for Graph Theory; solved/analysed BFS/DFS, MST, DP; LeetCode practice plan (400 problems).
- Machine Learning & Deep Learning — Built ASR DeepCluster pipeline at IIIT-B; led depression-detection project (text/speech/face).
- NLP / LLMs — Built quality-assessment chatbot; SelfCheckGPT-style contradiction detection + resolution pipeline.
- Reinforcement Learning (safe/MARL) — Active reading on MAGRPO, safe RL (CROP), CO-CQL ideas; small prototypes.
- Full-stack & Tools — Java (Gradle, Swing), Python (Flask), React + Tailwind + Framer Motion; Whisper/Gemini integrations.

Examples for 3 skills
- NLP / LLMs: Designed a two-step contradiction detector to pick reliable answers across model outputs; improved accuracy and honesty.
- Full-stack & Tools: Built an AI mock-interview system (Flask + React) with voice input, live scoring, and PDF reports.
- Algorithms (C++): Implemented/analysed chromatic polynomials; wrote clean, tested code following Checkstyle.

Top 5 Strengths

- Ownership — Took end-to-end responsibility for the Virtual Calendar app (design, tests, analytics, exports).
- Clarity — Writes clear docs/Javadoc; explains proofs (cut property, LCS) in simple language.
- Persistence — Iterates until tests pass; tracks Checkstyle; fixes flaky cases.
- Learning Velocity — Picks up new papers/frameworks fast; turns reading into working demos.
- Collaboration — TA experience for 500+ students; integrates feedback from professors/TAs.

Examples for 3 strengths
- Ownership: Refactored calendar architecture (builder pattern, MVC) and added analytics + GUI without breaking tests.
- Persistence: Solved repeated CI failures (Javadoc, indentation, edge cases) until green builds.
- Clarity: Produced step-by-step proofs and dry-runs for BFS/DFS/MST that classmates could follow.

3) Target Companies (6–8) & Why

- Google DeepMind — strong RL/safe-RL work; world-class mentorship.
- Microsoft Research — applied NLP/healthcare + industry impact; Boston/Cambridge presence.
- NVIDIA — systems + AI acceleration; great for training/optimization skills.
- Meta FAIR — cutting-edge LLM/NLP research at scale.
- Anthropic — safety-focused LLMs; aligns with my hallucination-reduction interests.
- OpenAI — frontier LLM research; strong eval and safety culture.
- IBM Research — healthcare NLP and trustworthy AI; fits my prior ASR and safety interests.
- Cohere / AI2 — focused NLP research and open science; good mentorship and publications.

4) "To-Do" List with Due Dates (top 5)

1. Update résumé + portfolio links (GitHub READMEs, demos, PDFs) — Dec 20, 2025
2. Finalize Virtual Calendar v1 (tests, screenshots, short demo video) — Jan 15, 2026
3. Shortlist & apply to 20 internship roles (track in a sheet; tailor résumé) — Jan 31, 2026
4. Weekly LeetCode plan (30/wk; topics: DP/graphs/intervals/strings) — start Dec 8, 2025, ongoing
5. Research draft outline + experiments (NLP safety/MARL) — outline Jan 5, 2026, first results Feb 15, 2026

5) Professional Brand / Elevator Pitch

I'm a Northeastern MSCS student focused on **NLP and safe reinforcement learning**. I've built real systems—from a **Virtual Calendar** with analytics to an **AI mock-interview app** with voice and live scoring. In research, I work on making LLMs **more reliable** by detecting contradictions and reducing hallucinations; I'm also exploring **safe MARL** ideas from recent papers. I like clean design, strong tests, and shipping demos. I'm looking for a **Summer 2026 ML/NLP/RL internship** where I can turn research into practical, reliable products.

6) Networking (3–4 events to attend)

- Khoury/Northeastern Career Fairs & ML/NLP employer info sessions (Spring 2026).
- Boston ML/NLP Meetups (monthly) — quick lightning talks + networking.
- University seminars (Northeastern/MIT/Harvard NLP/RL talks) — attend and ask 1 good question each time.
- Conference workshops (virtual/local) — NeurIPS/ICLR/ACL workshops or meetups; present a poster if ready.

Quick next steps (simple checklist)

- Send résumé to 2 mentors for feedback this week.
- Turn your research idea into a 1-page plan.
- Create a single Notion/Sheet to track applications, referrals, and follow-ups.
- Book 3 mock interviews (1 DSA, 1 systems, 1 ML).
- Write 2 tailored cover-letter templates (research-heavy vs product-heavy).