

Problem Description

For my project I want to create a ReAct agent that searches and analyzes job listings, tailors a resume to each job description for personalized applications, and keeps track of progress in my google drive.

- [Sheets Link](#)
- [Drive Link](#)

PEAS

Performance Measure

Application Quality

- Can find jobs that i'm qualified for
- Creates a personalized resume using a template depending on the job description (docx or pdf)

Efficiency

- Finds jobs that fit my interests
- Does it save me time compared to me manually applying?

Results

- Keep track of possible employers in my google sheet correctly and accurately
- Does it get me any interviews?

Environment

- My profile: experience, education, projects, skills, languages, job preferences
- External job sources: job boards, company career pages
- Google Sheet tracking jobs
- Resume template

Actuators

- Editing Google sheet
- Rank job opportunities
- Generate Resume

Sensors

- Scrape job postings
- Read and parse user profile data
- Read current contents of the Google Sheet
- Read resume templates

Tools

1. Chrome Dev Tools MCP

<https://github.com/ChromeDevTools/chrome-devtools-mcp>

- Scrape job descriptions

2. Google Sheets Tool

- Append new job rows
- Update job status, resume links
- Retrieve jobs

3. Google Drive Tool

- Upload DOCX/PDF resumes
- Return shareable Drive URLs
- Store all resumes under **JobAgent/Resumes/**
- Updates the sheet with the link

4. Resume Document Tool (Markdown + Pandoc)

- Save generated resume content as Markdown
- Convert MD → DOCX/PDF (Pandoc)
- **FirstName_LastName_JobTitle.docx**
- Provide output paths for Drive upload

5. Profile Loader Tool

- Provide structured representation of the user's skills, experience, and preferences

Agent Workflow

- Scraps job postings
- Evaluates fit score
- Logs jobs into Google Sheet
- Generates tailored resumes
- Uploads resumes to Drive
- Marks jobs as "**Ready to Apply**"

try in this order:

1. given a job description...
2. look at a specific company careers page {url or name}
3. search for companies in {city}

Week 1 - Process

for most of my queries I say **Find software engineer jobs in St george utah**

Scraping jobs using Chrome Dev Tools

So painful to figure out how to avoid captchas. After reading the documentation I could look more "human" after I ran this command in one shell `/Applications/Google\ Chrome.app/Contents/MacOS/Google\ Chrome --remote-debugging-port=9222 --user-data-dir=/tmp/chrome-profile-stable`. It just opens up a chrome browser but isn't tied to my personal data. I got the command from [Step2](#)

This is the result I got:

==== Final Answer ====

I have found several software engineer jobs in and around St. George, Utah on Indeed.com.

Here is a summary of the job postings:

- **DevOps Engineer**
 - **Company:** Zonos
 - **Location:** Saint George, UT 84770
 - **Salary:** From \$90,000 a year
- **Aerospace Embedded Software Engineer**
 - **Company:** Baxter Aerospace, Inc
 - **Location:** Saint George, UT 84790
 - **Salary:** Pay information not provided
- **Software Engineer**
 - **Company:** foreUP
 - **Location:** Remote in Utah
 - **Salary:** Pay information not provided
- **Flight Embedded Software Engineer**
 - **Company:** Baxter Aerospace, Inc
 - **Location:** Saint George, UT 84790
 - **Salary:** Pay information not provided
- **AI Software Engineer**
 - **Company:** Nuvia Dental Implant Center
 - **Location:** Remote in Utah
 - **Salary:** \$140,000 - \$220,000 a year
- **Staff Software Architect (aka Head Problem Solver)**
 - **Company:** Zonos
 - **Location:** Saint George, UT 84770
 - **Salary:** From \$180,000 a year
- **Embedded Software Engineer**
 - **Company:** GE Aerospace

- **Location:** Saint George, UT 84790
 - **Salary:** Pay information not provided
- **Cloud Engineer/Sr Developer**
 - **Company:** CGI Group, Inc.
 - **Location:** Remote in United States
 - **Salary:** \$70,800 - \$156,700 a year

You can view the full search results directly on Indeed here:

<https://www.indeed.com/jobs?q=software+engineer&l=St+George%2C+UT>

Resume tools

I realized my personal info is too long to paste directly in my prompt so I needed to create a tool where I can describe myself. I gave an LLM my resume and told it to create a json object and I saved it as my **profile.json**. The read profile tool just returns said json.

For the resume builder tool I mainly had a hard time with file naming and storage/retrieving.

Creating Drive Tools

I used a few of google's quickstart examples as a canvas for my tools. I ran into issues with auth so I made a flag to regenerate the token.json. It was adding job listing like I wanted but the resumes wouldn't translate from md using pandoc. The generated md resume sounded SOLID (even I would hire me). At this point I

haven't been able to test out my upload to docs tool.

	A	B	C	D	E	F	G
1	Title	Description	Company	location	Job Link	Resume Link	Status
2	Software Engine Full-time	foreUP	Remote in Utah	https://www.indeed.com/rc/clk?jk=1	not applied		
3	Embedded Softv Full-time	Baxter Aerospac	Saint George, U	https://www.indeed.com/rc/clk?jk=1	not applied		
4	UI Engineer Un 3-5 years of dev	White Bay	Remote in Unit	https://www.indeed.com/pagead/click?k=1&t=1	not applied		
5	Staff Software A Full-time	Zonos	Saint George, U	https://www.indeed.com/rc/clk?jk=1	not applied		
6	Senior Field App Full-time	Wolf Advanced	United States	https://www.indeed.com/pagead/click?k=1&t=1	not applied		
7	Aerospace Emb Full-time	Baxter Aerospac	Saint George, U	https://www.indeed.com/rc/clk?jk=1	not applied		
8	AI Software Eng Full-time	Nuvia Dental Im	Remote in Utah	https://www.indeed.com/rc/clk?jk=1	not applied		
9	Senior Applicat Full-time	Wolf Advanced	United States	https://www.indeed.com/pagead/click?k=1&t=1	not applied		
10	DevOps Enginee Full-time	Zonos	Saint George, U	https://www.indeed.com/rc/clk?jk=1	not applied		
11	Senior Systems Full-time	Wolf Advanced	United States	https://www.indeed.com/pagead/click?k=1&t=1	not applied		
12	Embedded Softv Full-time	GE Aerospace	Saint George, U	https://www.indeed.com/rc/clk?jk=1	not applied		
13	Analyst Program Conduct automa	White Bay	United States	https://www.indeed.com/pagead/click?k=1&t=1	not applied		
14	Embedded Softv Work on team of GE Aerospace		Saint George, U	https://www.indeed.com/rc/clk?jk=1	not applied		
15	Analyst Program Conduct automa	White Bay	United States	https://www.indeed.com/pagead/click?k=1&t=1	not applied		
16	Software Engine Candidate must	foreUP	Remote in Utah	https://www.indeed.com/rc/clk?jk=1	not applied		
17	Aerospace Emb 3+ years of prof	Baxter Aerospac	Saint George, U	https://www.indeed.com/rc/clk?jk=1	not applied		
18	Mastercam CNC Must be a U.S. p	Baxter Aerospac	Saint George, U	https://www.indeed.com/rc/clk?jk=1	not applied		
19	CNC Programma Experience prog	FlexTrades	United States	https://www.indeed.com/pagead/click?k=1&t=1	not applied		
20	Senior Systems Working closely	Wolf Advanced	United States	https://www.indeed.com/pagead/click?k=1&t=1	not applied		
21	Staff Software A When millions of	Zonos	Saint George, U	https://www.indeed.com/rc/clk?jk=1	not applied		
22	Senior Field App Working closely	Wolf Advanced	United States	https://www.indeed.com/pagead/click?k=1&t=1	not applied		
23	Embedded Softv 3+ years of prof	Baxter Aerospac	Saint George, U	https://www.indeed.com/rc/clk?jk=1	not applied		
24	DevOps Enginee 1 month paid tim	Zonos	Saint George, U	https://www.indeed.com/rc/clk?jk=1	not applied		
25	UI Engineer Un 3-5 years of dev	White Bay	Remote in Unit	https://www.indeed.com/pagead/click?k=1&t=1	not applied		
26	AI Software Eng We're looking fo	Nuvia Dental Im	Remote in Utah	https://www.indeed.com/rc/clk?jk=1	not applied		
27	CNC Programma That means, eve	Czarnowski Disp	Hybrid work in S	https://www.indeed.com/rc/clk?jk=1	not applied		
28	Staff Software A When millions of	Zonos	Saint George, U	https://www.indeed.com/viewjob?jk=1	not applied		
29	Staff Software A When millions of	Zonos	Saint George, U	https://www.indeed.com/rc/clk?jk=1	not applied		

Optimized prompt

For a while it would take 20+ steps to scrape jobs but now it takes about 5! The mcp I'm using has a tool called [evaluate script](#). It's pretty dangerous because it can run javascript in the console of the DOM. In my prompt I added an example script with potentially useful selectors to do the scraping. Before it was producing garbage code and that's why it took so many tries.

Results

== Final Answer ==

I found 15 software engineer jobs in St. George, Utah. I created a tailored resume for the "UI Engineer" position and uploaded it to Google Drive, updating the link in row 63 of your job sheet.

It actually did the thing! but I was disappointed with the resume. My first attempt (row 62 col E) was a lot more promising but still not perfect. [Final docx resume](#)