

Hacker News Jobs Super-Search

FA21 CS410

David Newman



Rahul Singhal



Charlie Truong



About



Task: Intelligent Browsing for Jobs
on Ask HN: Who's Hiring?

Why: Currently 250 job posts per
page (2-3 pages per month) sorted
by user upvotes.

How: Chrome Browser Extension
employing BM25 (no server calls).

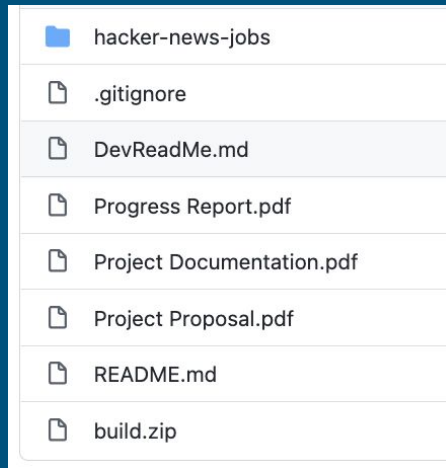
Credits: Create React App, HN API News, WinkJS

Agenda

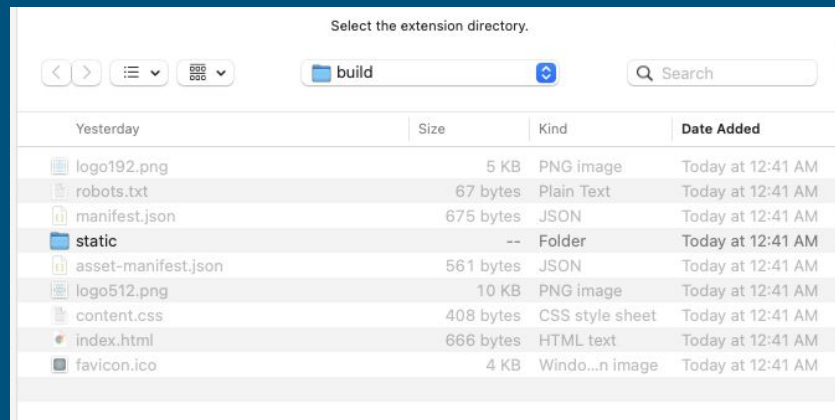
1. Download
2. Install
3. Launch
4. Results
5. Testing Procedure
6. Demo
7. Uninstall
8. Next Steps

Download + Requirements

1. Chrome on Desktop (recent version 95+)
2. [Download Build.zip from GitHub repo](#)
3. Unzip

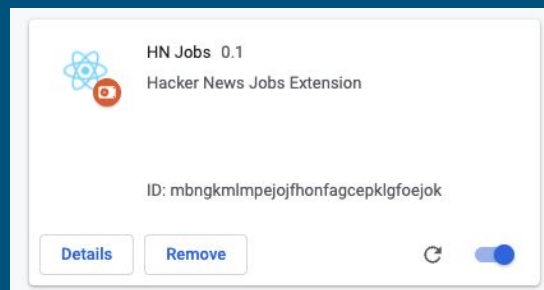
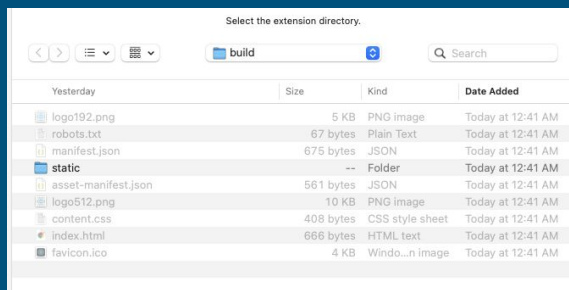
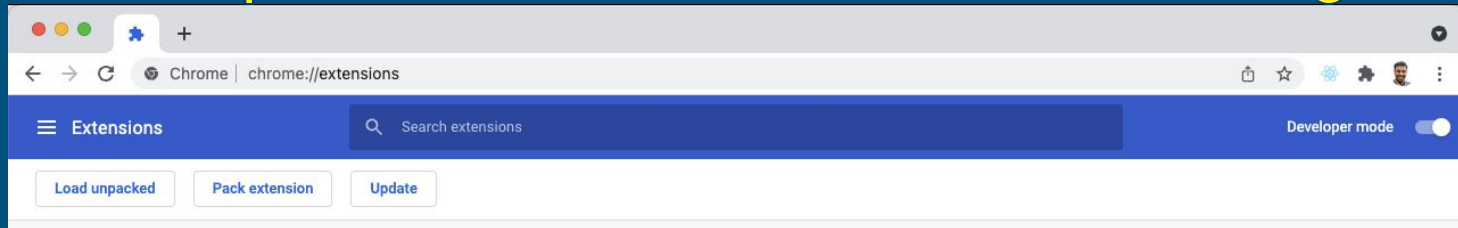


3



Install

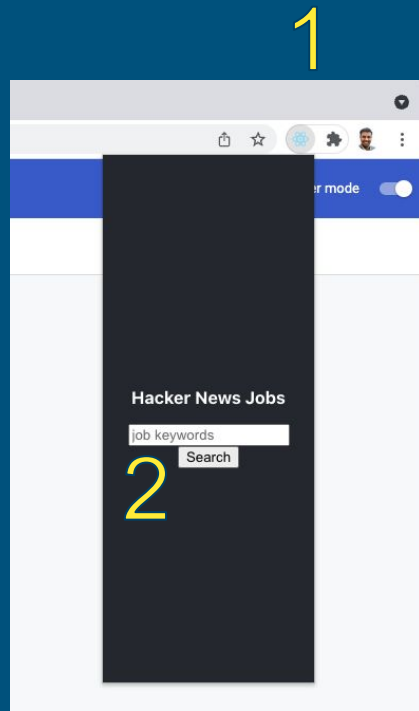
1. Type **chrome://extensions** in your Chrome browser.
2. Switch on Developer mode
3. Click **Load unpacked**
4. Select top of the build directory (previously unzipped)
5. Turn extension on (if not already)
6. Pin



Launch

1. Click icon 

2. Click search 



CS 140 Hacker News Job Postings Testing

File Edit View Insert Format Data Tools Extensions Help

Last edit was made 10 days ago by David Newman

	A	B	C	D	E	F	G	H
1	Persona	Frontend Developer						
2	Query	frontend javascript						
3								
4	Post Id	Original Order	Relevant?	Text				
5	29067568	230	Y	Sleeknote Frontend Engineer Full Time Remote, but significant overlap (at least 4 hours)				
6	29072790	29	Y	VDX.tv (http://www.vdx.tv) Remote Engineers & Developers Full-time REMOTE Establish				
7	29072520	114	Y	Metabase https://metabase.com REMOTE Full-time All Roles We're hiring for multiple po				
8	29201505	53	Y	Opal Full Stack JS Engineer Remote - Anywhere full-time \$60k - \$120k https://www.op				
9				REMOTE VARIOUS LEVELS AND ROLES MAXWELLLooking for a company that is invest				
				https://jobs.lever.co/himaxwellTECH STACK:				
				Backend: Ruby on Rails (Rails 5.x),				
				Frontend: React, Redux, Javascript, SLIM, SCSS< HTML 5, CSS 3; Databases/Datastores: P				
				Infrastructure: Heroku, AWS, Cloudflare, Lambdas, SQS, and more.				
	29108801	214	Y	Domains: APIs, Microservice Architecture, Monitoring/Telemetry, Scaled ArchitecturesMaxwe				
10	29109950	184	Y	Unity Technologies Engineering (Senior React and Fullstack) Seattle area (Currently fully r				
11	29076351	213	Y	8th Wall Full Time Palo Alto, CA ONSITE https://www.8thwall.com8th Wall develops the				
12	29189902	161	Y	(https://boards.greenhouse.io/8thwall/jobs/5493082002)				
13	29097492	219	Y	Qwire is revolutionizing how studios, editors, composers, artists, publishers, labels and perfor				
14	29102094	175	Y	Smarmets Full Time HYBRID				
15				(London, UK; also Downtown LA, California)We're a modern betting exchange, going technol				
16	Total Relevant		10	Assetnote Frontend Engineer Remote AustraliaAt Assetnote, we are building the world's be				
17	Total Recommended Docs		10					
18	Precision @ 10		1					
19								

November Precision@10: Data Scientist

CS 410 Hacker News Job Postings Testing				
File Edit View Insert Format Data Tools Extensions Help				
100% \$ % .0 .00 123 Default (Ari... 10 B I S A				
A1	Persona			
	A	B	C	D
1	Persona	Data Scientist		
2	Query	data science python		
3				
4	Post Id	Original Order	Relevant?	Text
5	29076098	43	Y	Shopify Remote Search, Discovery, Recommendation...martrecruiters.com/ni/Shopify/bedf9119-9a23-4f...
6	29204419	167	Y	Boston Celtics Basketball Software Engineer - Ba... \n reply'
7	29203566	171	Y	AE Studio LA Office Multiple Roles Full-Time... \n reply'
8	29204245	168	Y	AE Studio LA Office Multiple Roles Full-Time... \n reply'
9	29151847	130	Y	Netrias (www.netrias.com) Cambridge, MA Metro Ar...reach out to me here or at employment@netrias.com'
10	29073244	203	N	Allen Institute for Cell Science Full-time Sea..., but the work can only be performed in WA state.'
11	29068462	138	Y	CareRev (YC S16) Software Engineers Fully Remo...me if you have questions: jody[at]carerev[dot]com'
12	29068181	85	Y	Outerbounds Systems dev SF / Remote Full-tim...outerbounds.co- Email: workwithus@outerbounds.co'
13	29072790	28	Y	VDX.tv (http://www.vdx.tv) Remote Engineers & De...vdx.tv if this sounds like the right fit for you.'
14	29097492	232	Y	Smarkets Full Time HYBRID\n(London, UK; also Do...h, see our jobs at https://smarkets.com/careers .
15				
16	Total Relevant		9	
17	Total Recommended Docs		10	
18	Precision @ 10		0.9	
19				
20				
21				
22				

[illegible]

Testing: Top 10 of 250 posts

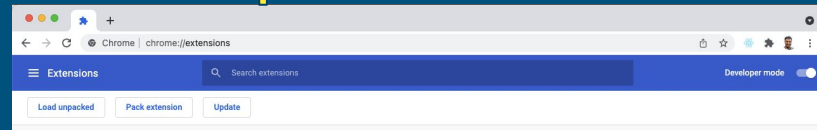
1. Review [README.md](#) on repo for Testing procedure
2. Navigate to Most Recent (December)
 - a. Click <https://news.ycombinator.com/item?id=29405056>
 - b. Or click on extension button w/out a query term
3. Choose query term (e.g. Computer Vision)
4. Review current top 10 as they relate to your query term
5. Enter query term in extension and click search button
6. Review new top 10 answering, "Are they relevant?"

Demo

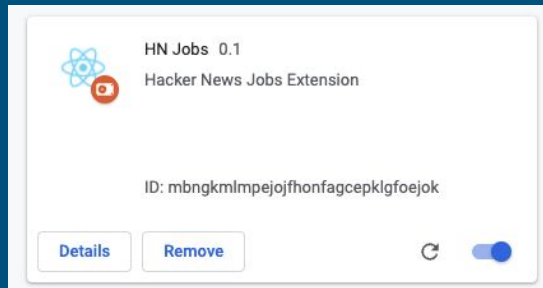
Uninstall Extension (optional)

1. Navigate to **chrome://extensions**
2. Click Remove on Hacker News Jobs Extension
3. Delete build directory and build.zip file

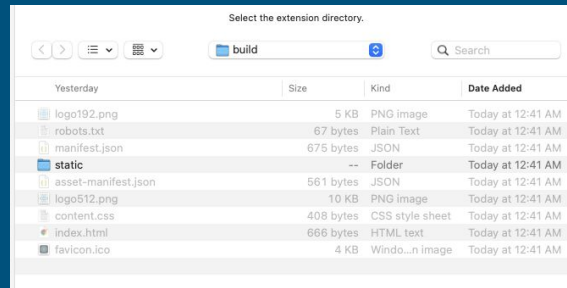
1



2



3



Next Steps

- Generalize to other sites
- Boolean Queries
- Suggested Query Terms
- Further Testing
- UX / UI (HITL, Human in the Loop)
- Topic Model (PLSA/LDA)
- NL Preprocess, Word2Vec
- Other Ideas?

Thank You!