NYC • j.hegstad@columbia.edu

Education

Columbia University, Engineering - Class of 2026 New York, NY

Coursework:

- Advanced Programming - C, Unix, TCP/IP, C++
- Intro to Databases - SQL, Python, HTML
- Data Structures - Java
- VR & AR (Grad-Level) - JS/TS AR dev., research analysis
- Discrete Math, Linear Algebra, Probability & Statistics
- UI Design, 3D UI Design, Applied Stats Computing (Next Semester)

Experience

Hess Corporation Minot, ND

- Summer 2024, full-time

- Combined hundreds of overlapping policies/recommendations into a unified dashboard
- Hand-built a training board for field automation workers; Conducted on-site network/device assessments
- Built a JS/Python to adhere to data security policies while using LLMs
  - Excel x Python tool to automate textual analysis on hundreds of rows
- Proposed and set up a self-populating knowledge graph to centralize company information

Leadership & Activities

Columbia Space Initiative (NASA SUITS mission) | **Co-Lead** '24-'25, **Developer** '24
- C#, Unity AR dev., autonomous rover navigation |
Columbia Undergraduate Scholars Program | **C.P. Davis Scholar** (Top engineering admits)
Poker Club, Climbing Club, Effective Altruism Club | Member

Projects

My Website

AR, Music:

SUITS-23-24-HMD	- Hololens 2 astronaut guidance system, successfully tested at Johnson Space Center	
Winter Internship	- Snap AR glasses ⇄ AI Knowledge Manager	(Typescript, LLMs)
VR & AR	- Snap AR glasses guitar training app	(Typescript/Javascript)
Guitar Trainer	- Chord/scale manipulation program	(Python)
Jazz Guitar Site	- Jazz guitar chord & song database/web app	(SQL, Python)

AI/Other:

Personal GPT	- ChatGPT clone CLI using OpenAI API	(Python)
BigRedHacks (BRH)	- AI note management extension/web app	(Python, JS, SQL)
Devfest Hackathon	- Journal-based podcast recommendations	(Python)
Advanced Prog.	- Web server from scratch	(C)

Skills & Interests

Skills: Proficient in Python, Java, C, C#, SQL, Typescript; moderate HTML, CSS, React, AWS
Interests: Blockchain, AI/ML, data analysis, LLMs, VR & AR; poker, electric guitar