HASAN A. HASAN

RESEARCHER · DEVELOPER · EDUCATOR



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ABOUT ME

Self-taught researcher and educator with 15+ years in tech — from IT infrastructure to applied AI. I specialize in building AI tools, educational platforms, and Arabic NLP systems. I'm passionate about open-source, self-hosting, and rethinking how machines understand language.



~ 1M subscribers on Youtube



~110K Students on **Udemy**



Running 7+ Projects Solo

KEY PROJECTS

<u>SimplerLLM (Open Source Library)</u>

Unified Python interface for interacting with LLMs. Simplifies building agents, apps, and tools with multi-provider support.

SimplerLLM.com

Browser-based suite of interactive tools to experiment with LLMs. Designed for fast prototyping, prompt engineering, and educational research workflows.

TubeDigest.com

Al-powered YouTube companion that transforms any video into structured educational content, summaries, quizzes, and Socratic Q&A.

Deeparabic.com

Deeparabic is a research and AI project exploring the deep structure of Arabic through letter-level semantics and rootbased models to advance Arabic NLP.

LearnWithHasan.com

Main academy site hosting premium courses on Python, AI agents, self-hosting, WordPress development, and automation.

PromoterKit.com

Al-powered tools for marketers and developers. Micro-SaaS tools to boost content & SEO.

PowerKit.dev

A set of essential web tools for coding, file conversion, testing, and productivity

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Currently working on 3 new projects: AI for IT Pros, SelfhostSchool, and Wp4SaaS

SKILLS & TECHNOLOGIES

Core Tech Stack: Python, FastAPI, Docker, Linux, MongoDB, Redis, Qdrant, WordPress, JS

AI & ML: LLMs, NLP, Tokenization, Gen AI, Custom Embedding Models

Infra & DevOps: Self-hosting, VPS, VMWare, IT Networks, Windows Server

Content & EdTech: YouTube (1M+), Udemy (110K+), Online Marketing, Blogging

BACKGROUND & JOURNEY

- 2010–2016: Started in IT infrastructure Active Directory, RDS, Windows Server, VMware, thin clients
- 2012–2017: Self-taught coding (VB.NET, C#, Python) alongside a Master's in Computer Science
- 2017-Now: Created top-rated courses on Udemy (IIS, RDS, SMTP) and launched a YouTube channel now nearing 1M subscribers
- 2018-Now: Full-time builder and educator focusing on open-source tools, LLMs, and hands-on AI education
- Current: Researching Arabic NLP from first principles including tokenization, letter embeddings, and vector DBs

CURRENT RESEARCH: LLM ARCHITECTURES & LANGUAGE-SPECIFIC MODELS

Currently focused on exploring and prototyping novel LLM architectures optimized for both general use and language-specific modeling.

My primary direction involves:

- Character-level LLM design: Treating characters as semantic atoms rather than relying on word/token memorization
- Lightweight, interpretable models: Architectures that scale efficiently and remain transparent
- Arabic-centric research: Developing a new generation of models built on semantic letter embeddings and morphological awareness
- **Custom tokenization alternatives**: Building models that understand meaning through structure rather than statistics
- **Novel evaluation methods**: Including tests like letter arithmetic and intuitive word generation for semantic understanding

This research blends practical AI engineering with linguistic insight, aiming to rethink how LLMs understand and generate meaning across languages — especially in underrepresented ones like Arabic.

FINAL NOTE

I'm not actively job-seeking (I already have my online business) but if your lab or company values self-driven R&D, deep curiosity — I'd love to contribute. I care more about meaningful work than titles.