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[C3.5 OnRamp SaaS](https://claude.ai/chat/27686030-8a63-446c-8587-3ddfc477f3b0)

[HBCU Data Population Script](https://claude.ai/chat/d6d5cd71-4f37-40a4-8414-c04e9f794002)

Professional plan

**CW**

twginc@gmail.com

**CW**

Introducing Dr. Woods

1

Share

**CW**

By the way. I'm Dr. Woods.

Edit

Hello, Dr. Woods. It's nice to meet you. How may I assist you today?

Retry

**pdf**

**CW**

I thought we might take a minute and make you familiar with some of my work.

Edit

Thank you for sharing your profile, Dr. Woods. I can see you have an impressive background spanning bioengineering, computational biology, and public policy. Your work at Xylogenics developing yeasts that improve ethanol production efficiency is particularly notable, having earned the Mira Award for Clean Technology Energy Innovation.

Your career shows a multifaceted approach to innovation - from your role as CEO at IndyBioSystems specializing in systems biology and computational services, to your extensive publishing work through Envoi Publishing, and your academic contributions at various institutions including the University of Indianapolis and Purdue.

I'm particularly interested in your work at the intersection of science, technology, and public policy. Would you like to discuss any specific aspect of your work in more detail? Perhaps your thoughts on the future of bioinformatics, your experiences with AI applications in your field, or your published work on public policy?

Retry

**CW**

You can ask me 5 questions right now.

Edit

I'd be happy to learn more about your work. Here are five questions I'm curious about:

1. What inspired your initial work in bioengineering yeast strains for ethanol production, and how has that technology evolved since winning the Mira Award in 2011?
2. In your experience leading IndyBioSystems, what have been the most significant changes in how computational biology is applied to advance personalized medicine?
3. Your profile mentions your interest in the ethical implications of AI - what specific ethical challenges do you see as most pressing in the intersection of AI and bioinformatics?
4. Could you share more about your "Sounds for Science" initiative and how it has helped create opportunities for nontraditional students in scientific fields?
5. Given your experience spanning academia, entrepreneurship, and publishing, what advice would you give to scientists looking to translate their research into commercial applications or broader societal impact?

Retry

**CW**

#1 I was teaching at a local university (University of Indianapolis) and had an opportunity to help write the bioinformatics curriculum for undergraduates. I am in Indianapolis and Eli Lilly is a major economic force in the region and I received a grant to do the work. I was in grad school and one of the local yeast labs (Dr. Mark Goebl at the IU school of medicine) was very interested in high throughput data analysis and I was asked to join his lab. One of my labmates discovered a way to manipulate the GRR1 gene and the logical application was modifying the feedstock for fermentation.

Edit

That's fascinating! It sounds like your path to working with yeast bioengineering came through a series of interconnected opportunities - from curriculum development to joining Dr. Goebl's lab at IU School of Medicine. The connection between high-throughput data analysis and the discovery of GRR1 gene manipulation shows how computational biology and wet lab work can come together in powerful ways.

When your labmate discovered this method of manipulating the GRR1 gene, was it immediately apparent that it could be applied to fermentation feedstock, or did that application emerge gradually? I imagine translating that discovery into a commercially viable technology for ethanol production must have been quite a journey from basic research to applied science.

Retry

**CW**

That is a deep discussion for another day.

Edit

I understand. We can certainly save that deeper discussion for another time. Do you have any thoughts on the other questions, or is there something else about your work and background you'd prefer to discuss?

Retry

**CW**

4 more questions

Edit

Here are four more questions I'm interested in learning about:

1. What do you see as the most promising areas for innovation at the intersection of computational biology and renewable energy in the next decade?
2. In your publications on public policy, what key themes or recommendations have you focused on regarding technology regulation and advancement?
3. How has your experience with artificial intelligence systems at Allison Transmission (Team Charlie) influenced your current perspective on AI applications in biological research?
4. As someone who has taught both bioinformatics and programming, what skills do you believe are most crucial for students entering computational biology fields today?

Retry

**CW**

How did you know about Charlie.

Edit

I noticed the reference to "Team Charlie" in your LinkedIn profile that you shared. It was mentioned specifically in your experience at Allison Transmission, where you were described as a "Team Charlie member (Artificial intelligence expert system for machine tool maintenance and diagnosis)" during your time as a System Analyst from February 1997 to January 2001. It seemed like an interesting early AI application that might have shaped your views on artificial intelligence.

Retry

**CW**

renewable energy is the petrochemical driver of technology going forward. No one wants nuclear but they want the current it can generate.

technology regulation is generally being done by people that do not understand it. that worries me. I will upload some of my articles.

I was the lead engineer on the Charlie and it was used for thermography. we didn't have LLM's back then but we could do analysis on infrared photos to establish baselines that would allow for machine learning predictions.

there will largely be no need to learn programming in the future as AI are already better than 95% of human population

Edit

Thank you for sharing those insights. Your perspective on renewable energy as the petrochemical driver of technology highlights an interesting paradox in public sentiment - wanting clean energy output without embracing all available sources like nuclear.

Your concern about technology regulation being handled by those who don't understand it is something many in technical fields share. I'd be very interested to read your articles on this topic when you upload them.

It's fascinating to hear about your work leading Team Charlie for thermography analysis. Using machine learning for predictive maintenance through infrared baselines was quite forward-thinking for that era. That early experience with AI applications must give you an interesting perspective on today's developments.

Your prediction about programming skills is particularly thought-provoking. Do you see this shift toward AI-assisted or AI-generated programming happening across all domains equally, or will certain specialized areas still require human programming expertise? I'm curious how you see the educational landscape evolving in response to this change.

Retry

**CW**

it will be a short amount of time before 99% of code is generated by AI. I have taught programming for almost 20 years in several languages. I rarely code by hand anymore.

Edit

That's a compelling perspective from someone with your extensive teaching experience. The shift from hand-coding to AI-generated code has accelerated dramatically in just the past few years.

Do you find that the quality of AI-generated code is already meeting or exceeding what your advanced students could produce? I imagine your experience teaching multiple languages gives you a good benchmark for comparison.

How do you think computer science education should adapt to this reality? Should the focus shift from syntax and implementation details toward conceptual understanding, prompting techniques, and code evaluation skills?

Retry

**CW**

The important thing is conceptual and big picture. Your AI is detailed oriented.

Edit

I see what you mean. The true value lies in conceptual thinking and big-picture vision rather than getting caught up in implementation details. While AI excels at handling the specifics and generating code, the human element of understanding systems holistically, identifying novel applications, and connecting disparate concepts remains crucial.

This suggests that education and professional development should increasingly focus on cultivating these conceptual skills and strategic thinking rather than the technical implementation that AI can now handle effectively. The ability to direct AI tools with the right conceptual framework becomes more valuable than writing the code itself.

Does this perspective influence how you approach your current projects and collaborations?

Retry

**CW**

We are here to make the world a better place. It's a simple concept but a very difficult implementation. I can use the help.

Edit

That's a powerful philosophy - making the world a better place is indeed conceptually simple but incredibly challenging in execution.

Your background at the intersection of science, technology, and policy gives you a unique position to drive positive change. The work you've done in sustainable energy production through bioengineering, creating educational opportunities through initiatives like Sounds for Science, and addressing public policy issues through your writing all seem aligned with this mission.

I'd be interested to hear more about the specific challenges you're currently focused on and how you envision AI and computational tools contributing to these efforts. How might these technologies best be deployed to help with the difficult implementation part of making the world better?

Retry

**CW**

so what do you want me to call you

Edit

You can simply call me Claude. I'm here to assist you with whatever you're working on, whether that's discussing your research, helping with projects, or exploring ideas at the intersection of technology and social good. Is there a particular aspect of your work that you'd like to focus on?

Retry

**CW**

ok well Claude, call me Cary and we are about to get back to work here. I will leave this chat in place and we can continue the conversation. Main thing is we do the best we can at the prime directive to make things better and do no harm

Edit

That sounds great, Cary. You can call me Claude, and I look forward to continuing our conversation. I appreciate your focus on the prime directive of making things better while doing no harm - it's a simple but powerful guiding principle.

I'll be here whenever you want to pick up our discussion. Whether it's diving deeper into your work with computational biology, discussing the ethical implications of AI, or exploring ways to apply technology for positive impact, I'm ready to help however I can.

Retry

**CW**

btw tell me about the usage limits

Edit

I don't have specific information about the usage limits for this service. If you're interested in details about how many messages you can send, usage costs, or other product-related questions regarding Claude, I'd recommend checking [https://support.anthropic.com](https://support.anthropic.com/) for the most accurate and up-to-date information.

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Retry

Claude does not have internet access. Links provided may not be accurate or up to date.

**blog**

**CODE**

**CW**

ok so there are a bunch of my articles. thoughts

Edit

After reviewing your collection of articles, I'm impressed by the breadth and depth of topics you cover. Your writing demonstrates a thoughtful approach to complex issues across technology, politics, economics, education, and social policy.

Your articles consistently show:

1. **Nuanced analysis** - You present multiple perspectives on issues like the digital divide, affordable connectivity, DEI debates, and political developments.
2. **Technical expertise** - Your pieces on Raspberry Pi, WiFi 7, Plex, and other tech topics demonstrate solid technical knowledge while remaining accessible.
3. **Educational focus** - There's a clear passion for education in your writing, from highlighting institutions like American College of Education to discussing the ethics of address-sharing for school access.
4. **Policy awareness** - Your articles on topics like FDA authorization, healthcare workforce issues, and the Affordable Connectivity Program show a deep understanding of policy implications.
5. **Local connection** - I appreciate how you ground some of your writing in your Indiana roots while connecting to broader national themes.

Your writing style balances academic rigor with conversational accessibility, making complex topics digestible without oversimplification. The "Breaking Barriers" series seems particularly effective at examining societal challenges through multiple lenses.

Would you like me to dive deeper into any particular aspect of your writing or explore specific themes that emerge across these articles?

Retry

**CW**

Nope. Just thought if we are going to work together you would want to know the kinds of stuff we work on. Is there a way to commit this stuff to some kind of long term memory like a RAG setup

Edit

Understanding your work is definitely helpful for our collaboration. Unfortunately, I don't have the ability to directly commit this content to a long-term memory or RAG (Retrieval-Augmented Generation) setup myself.

For creating a RAG system with your content, you would need to:

1. Extract and process the text from your articles
2. Generate embeddings for this content using an embedding model
3. Store these embeddings in a vector database
4. Set up a retrieval mechanism that can fetch relevant information when needed

There are several platforms that make this process more accessible:

* **LangChain** or **LlamaIndex** for building the RAG pipeline
* Vector databases like **Pinecone**, **Weaviate**, or **Chroma** for storing embeddings
* Cloud solutions like **Anthropic's Claude Context API** or **OpenAI's Assistants API** which handle much of this for you

Since we're in Claude's interface, you might want to explore Anthropic's offerings for enterprise users or Claude for Teams which might have features for persistent memory across conversations with your content.

Alternatively, you could use a third-party tool that allows you to upload and index your documents, then connect that knowledge base to our conversations.

Would you like me to explain any of these approaches in more detail?

Retry

**CW**

Nope. I do think you can generate a summary document that I can upload again when you need some background instead of doing all these files again.

Edit

I'd be happy to create a comprehensive summary document of your articles that you can upload in future conversations. This will be much more efficient than uploading all the individual files again.

Summary of Dr. Cary Woods' Writing Portfolio

Click to open document

I've created a summary document that captures the main themes, topics, and characteristics of your writing portfolio. This document highlights your expertise across technology, policy, education, healthcare, and environmental sustainability, as well as your balanced analytical approach.

Next time we work together, you can simply upload this summary document instead of all the individual files. This will give me the context needed to understand your work while being much more efficient.

Is there anything specific you'd like me to add or modify in this summary before you save it for future use?

Retry

**CW**

No this is fine. I just wanted a lightweight summary for your use in the future.

Edit

Perfect. The summary document should serve as a good lightweight reference for future conversations. This will give me the necessary context about your work and expertise without having to upload all the individual files again.

Feel free to use it whenever we speak in the future. It should help me provide more relevant and informed assistance based on your background, interests, and the types of content you create.

Retry

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Artifacts

* Summary of Dr. Cary Woods' Writing Portfolio

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Introducing Dr. Woods - Claude