Deep Research Has Come for Your Job

Expert-Level Researchers Better Improve Their Skills

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Summary

Current AI research systems can research topics and write reports. These systems can replace expert-level persons. Persons, who are paid far less than expert-level researchers, can push the button at a much lower salary than experts. Expert-level researchers must find ways to contribute more value or be replaced. In the short term, researchers can run research businesses with dozens of pen names producing research reports. In the long term, it is more difficult and requires more thought. AI systems can provide ideas. Thoughtful persons better provide better ideas.

AI Systems Can Research Topics and Write Reports

Last week, I experimented with Deep Research from Google's Gemini. My quickly assembled prompt became the title of an 18-page report with 50-something references. The prompt was something like, "write a report on advanced applications of overrepresentation in training data for artificial intelligence systems."

The research paper was well done. Of course it can be criticized as can any research report. (see (Strauss, 2025)). For ten-minutes effort, however, the result was impressive. And provides a stark realization: AI deep research systems can research topics and write reports like expert-level researchers.

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This is no longer science fiction—it is simple fact. The old Turing test is obsolete.

Note: I work in computing. My research is in computing. These AI systems perform research in many fields from astronomy to zoology.

Note: my experiment used a Google system. This is not an endorsement of Google's system over any other offered by any other company. It was merely a convenient choice for a basic experiment. There are plenty of other choices. One comparison of some of the choices in is (Strauss, 2025).

Racing to the Bottom

Consultant Seth Godin has used the phrase "race to the bottom" for at least a dozen years. The idea is simple: find something that just about anyone can do and do it. Then watch someone else do it cheaper. And then yet another person does it cheaper. One day someone is making $300-a-pair shoes for 30¢. (Godin, 2020)

Godin noted the race to the bottom recently as applied to research papers.

If all that's needed is the push of a button, we can find someone cheaper than you to push it. — Seth Godin (Godin, 2025)

Not everyone can type the prompt I used in my experiment with overrepresentation in training data for AI systems. Far more people than I might admit can create that prompt and push the button. A computing engineer like me can charter studies in everything from theology to critical literature to jazz musicians playing rock and roll in the 1960s to the geologic record of the Grand Canyon. (Try the experiments).

The Future for Expert-Level Researchers

Expert-level researchers are at peril of losing jobs. That is a stark reality I learned last week. I hope I didn't learn it too late, but perhaps I did.

My quick advice for experts (the better-educated and better-experienced among us) is:

If you are better, you better get better.

Some Customers Don't Get It, Yet

The good news for some expert-level researchers is that some of their customers don't understand what has happened. They simply don't believe that the expert-level researchers they pay may be obsolete. They are happily paying tens of thousands of dollars for work that is accomplished in ten minutes with the typing of a clever prompt and the push of a button. They wouldn't know how to pay for research papers for $100. That would create short-term imbalances in their budgets that would be major headaches.

This is not the case for every expert-level researcher. Some expert-level researchers work for cost-conscious and efficiency-minded customers. Still, even the more savvy customers are caught mid-year with a surplus of research dollars.

Short-Term Advice

For the short-term (this may be for a year or a month as the future is difficult to predict as it seems the commercial AI systems turn upside down weekly), create a research lab. The research lab would be a one-person expert-level researcher company that looks like it employs dozens of expert-level researchers.

The one-person expert-level researcher would take assignments from customers in many fields and produce reports. Don't work too fast. Always take a week to produce a report. That timeline is fine until it isn't as someone else will race to the bottom and produce reports in a day. Adapt as necessary.

The reports would be created by dozens of non-existent expert-level researchers who work for the research lab, but don't really. If ethics is a concern, this research lab employes one expert-level researcher who uses many pen names. Writers of novels, songs, etc. have used pen names to publish in varied fields and genres for centuries. This is a time-honored practice. Take care with how it is used in this context.

The research lab employing pen names will work for a while, but not forever.

Longer-Term Advice

This is where the future of the expert-level researcher becomes tricky at best and perilous at worst. There are several tactics that may work.

Research isn't enough: prototype real systems. It won't be enough to write about overrepresentation in AI training. Prototype systems that demonstrate the concept. Perhaps AI systems will build demonstration systems next year (or month or week). For the time being, demonstrate the concepts described via prototypes. This is the extra step that doesn't happen with the push of a button. Therefore, it sidesteps the race to the bottom.

Combine the results of research. Generate three research reports. Study each. Copy and paste from each to form a new opinion with references and details. There is an old saying:

Stealing ideas from one person is plagiarism. Stealing ideas from many persons is research.

This combination of the results of research is a further step in research. Expert-level researchers can perform this step. Racing-to-the-bottom button pushers cannot. It is a way to add human and expert-level value to results produced by the software.

Work at three or more levels of abstraction. The research performed and report written by AI is the fundamental level of abstraction. Work in at least two more levels: the level above and the level below that level of abstraction.

The level above is the meta level: ask questions about the question or prompt asked of the AI deep research system. Consider the prompt used in the experiment mentioned above. A meta question could be, "what are three variations of the prompt used in the experiment?" Others include, "How would a theologian (historian, biologist, medical doctor, etc.) word the prompt used in the experiment?" And consider, "what is a more probing version of the prompt used in the experiment?"

The level below delves into details provided by the report. Examples include, "provide more detail on the second sentence of the third paragraph of the fourth section of the report." And also, "relate the concepts described in the first and fourth sections of the report." These continue with: (1) Why is this or that? (2) Who is the expert of ideas in section two? (3) Where is primary research for the second section being performed? (4) When did this field become important? The examples continue. Again, an AI system may be doing this next year or tomorrow. For now, it is a way to add human and expert-level value to results produced by the software.

References

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