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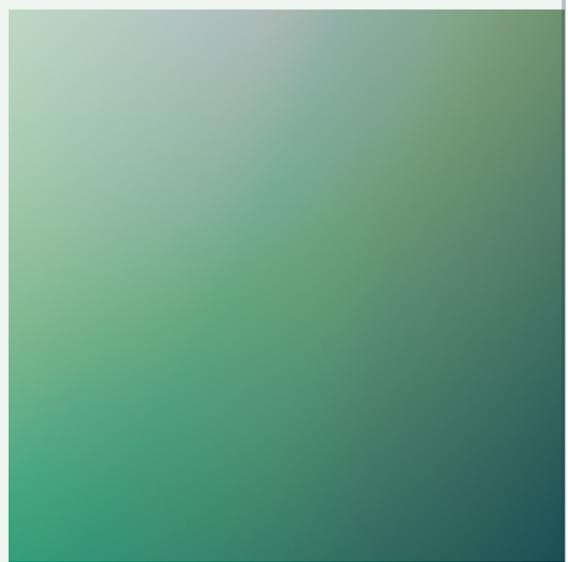
RESEARCH PROJECT BOOTCAMP

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TA + Curriculum Co-developer:

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OVERVIEW

- Time to build something :)
- 10 weeks, light worksheets and assignments
- Lots of reading and exploring
- Several writeups and presentations
- Small group collaborations

RESOURCES

- <https://github.com/interactive-intelligence/research-bootcamp>
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Everything is on the Github

There is no megadoc. All Github for this one.

Communication via **#research-bootcamp** channel
on Discord!

Finally, feel free to email me -- find it on the Github

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SCHEDULE

Five (ish) modules

- What Calls You?
- Subfield Exploration
- Research Focus Selection
- Crafting a Question
- Making Your Proposal

RESULTS

- Explored subfields of intelligence research
- Read and presented fascinating research in these fields
- Formulated a research question
- Deep-dived (diven? dove? doven?) into your research question
- Created a formal research proposal



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A first pass at the shaping of the gorge was when volcanoes erupted ~10 million years ago and basalt flows carved the shit out of the earth.

Then, massive floods during warmings of the Ice Age turned a canyon into a gorge with a river, within the last 2 million years.

There's something about the raw, time-bending power sketched by the sheer edges of cliff faces and rock formations, something about the slow, eternal churning of rivers, a power that we can't quite comprehend but we feel some satisfaction in being a part of.

We find patterns that we aren't conscious of finding. Our associative unconscious is much better at this than our logically inclined conscious. There is some deep connection to that power that calls us to cliff faces and ocean shores and mountain summits. The same forces that shaped them have shaped us and in a deeply subconscious way we share these thoughts with the trees that climb up the cliff faces and the wildflowers that find themselves in meadows on Mt. Rainier.

This is not just a research bootcamp on machine learning and neuroscience. It is a research bootcamp on machine learning and neuroscience, taught by Chaytan. And so you're going to hear a little about trees and rain and water and flowers.



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Angel's Rest



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The painted hills are older, formed from volcanic ash and byproducts around 35 million years ago. The red color comes from the composition of the ashes that came from the Cascade mountains erupting hundreds of miles away. The striations paint stories of various climactic waves.



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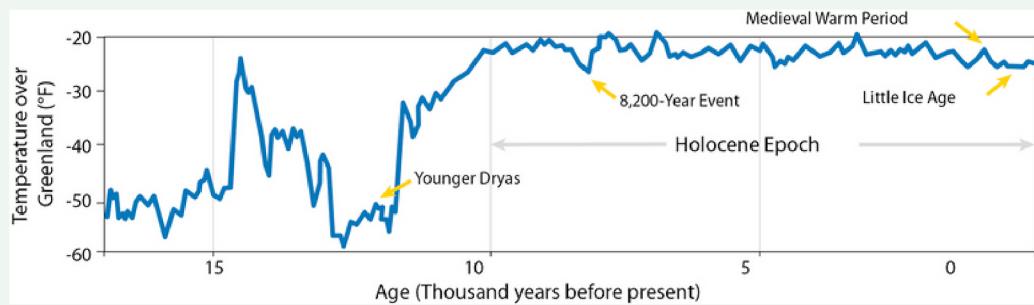
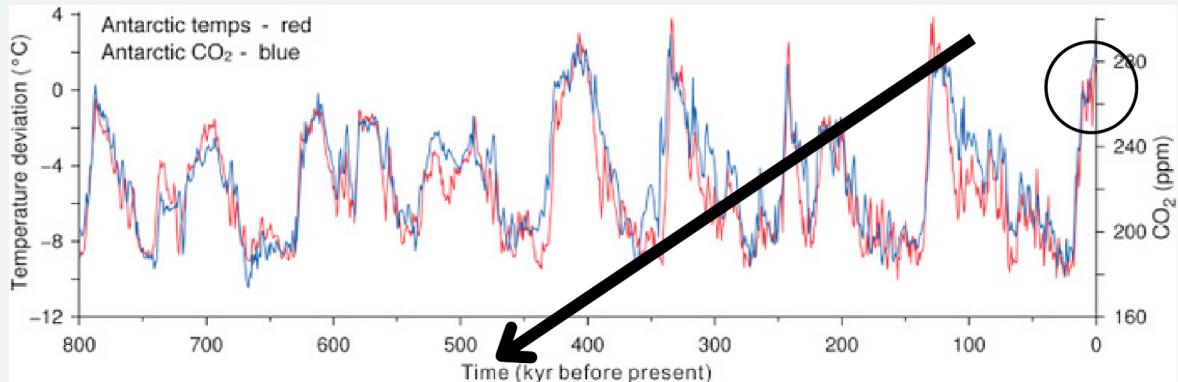
Humanlike ancestors have been evolving for around 7 million years.

The last ice age was about 10,000 - 12,000 years ago. We really have been capitalizing on a tiny microcosm of good weather in the grand scheme of life on Earth, and recently we've been out to bring it to a hasty end for ourselves.

We're pushing the limits of our adaptation -- adaptation to ourselves now more than the climate.

We spread over the globe like a fungus, connecting it in ways it has never been. Our infection is a new force shaping the globe, the species, the diversity of life, the kinds of reflections of the universe unto itself.

A successful infection does not kill its host.



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One of my points here, is that we need to humble ourselves.

Life, life is robust. We've been through a LOT. If humans are causing a mass extinction now, there is no doubt some life will get through it. It got through ice age after ice age, hothouse and volcanic hell. But human life is precarious. Human intelligence, the universe looking back at itself in wonder, is precarious. The diversity and uniqueness of the species is precarious. Many branches of the tree of life were wiped out by extinction events and never returned, despite suitable conditions (Dawkins v Gould book). Life is not globally optimal. Physics give no theoretical guarantees of convergence at a global minima. Our species, despite what our prideful tendencies want to believe, is really no different from the fragility of long extinct species. Trilobites lived for 300 million years but you won't see one today. We humans are just as much a condition of the grandiose will of the earth. What we recognize as society and humanity emerged a nanosecond ago, during these warmer, stabler 10,000 years of the Neolithic period.

Yet, I will grant this small concession: despite our relative fragility, we are a bit different. Humans may be the most apt to understand, change, and reshape these forces that have let us grow. We can come to honor and respect and learn from the everything that surrounds us now and is a part of us and our profound history. There is some way to elevate intelligence to a recurring tide of nature, not a fleeting ripple in geological spacetime.

Research, to me then, is about how.

THANK YOU

FOR YOUR CURIOSITY



VARIOUS TOPICS REFERENCED

Neolithic Revolution

https://en.wikipedia.org/wiki/Neolithic_Revolution

Implicit Learning

https://en.wikipedia.org/wiki/Implicit_learning

Arthur Reeber

Graphs / Charts

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Geology

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https://en.wikipedia.org/wiki/Painted_Hills