

# Update #2!

Hey everyone! Finally writing up the next email to let everyone know what's going on. I've been meaning to write this one for a while, so I'm glad I'm finally able to. Merry Christmas everyone!



*For the Swedes this goat is a symbol of Christmas.*

## Recap

After the last email was sent out, I had just moved into my new apartment and school was about to start. I had just gotten back from a backpacking trip and language classes were wrapping up.

# The First Quarter

```
public class AlphaBetaTransIterativeSearcher<M extends Move<M>, B extends Board<M, B>> extends

    public static long maxTime = Long.MAX_VALUE; // Not really using a max value

    public int maxDepth;
    public int minDepth;

    public AlphaBetaTransIterativeSearcher(int minDepth, int maxDepth) {
        super();
        this.minDepth = Math.max(0, minDepth);
        this.maxDepth = maxDepth;
    }

    public AlphaBetaTransIterativeSearcher(int maxDepth) {
        this(0, maxDepth);
    }

    public M getBestMove(B board, int myTime, int opTime) {
        M move = null;
        long start = System.nanoTime();
        for (int i = minDepth; i < maxDepth && System.nanoTime() - start < maxTime; i++) {
            move = super.getBestMove(board, myTime, opTime);
        }

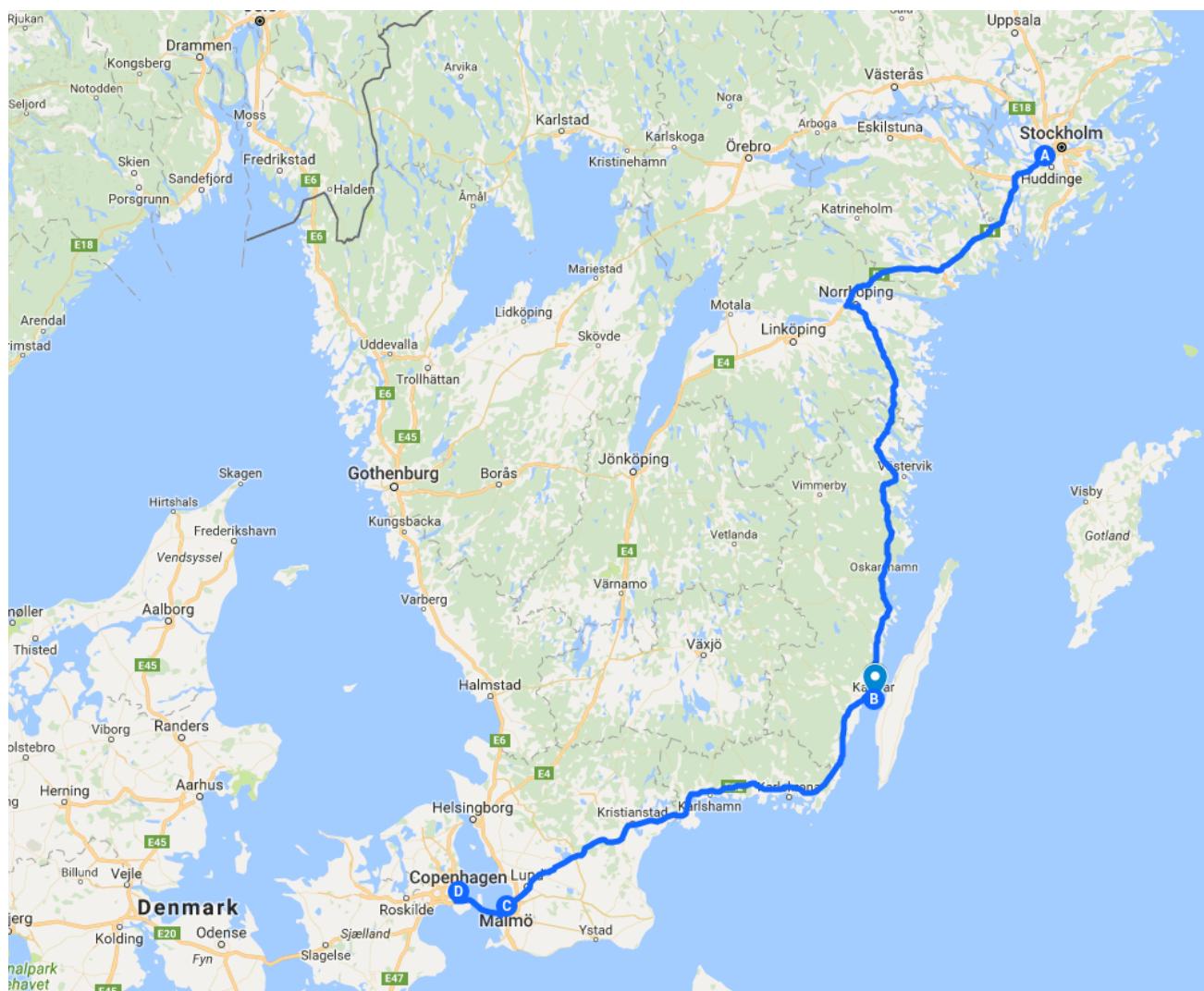
        return move;
    }
}
```

*A snippet of code from a school assignment*

Although this study abroad program isn't *officially* centered around a subject or theme, I've decided to make it as much about artificial intelligence as I can. So for the first quarter I took the introductory artificial intelligence and machine learning courses, as well as Swedish. Although they were pretty hard, we did cool things like making a program that plays chess or teaching a computer to recognize a face. The Swedish class was a bit disappointing though. We only meet once every other week so it was hard to get immersed in the language, especially with how good Swedes are at English!

An interesting difference in class structure I've found is that Europe tends to be much more theoretical than the US. My school here in Sweden is less theoretical than many other schools in Europe (according to my international friends), but still way more theoretical than UW. For example, at UW we would be taught some method or algorithm and be told to implement it within a given framework and then submit it with an explanation. Here, they almost don't care for the code at all. They give us a subject and ask us to write a paper on it, with example data from our code to prove certain parts of it. In short, at home our papers supported our code and here the code supports the papers. They also require you to register for exams which *almost* caused me some trouble. I made it out okay though and have been learning a lot.

# Road trip



A map of our trip

EDIT: Just received this photo album! (<https://goo.gl/photos/kkEmSzff2wx6b2h49>) I'll add photos here as I get them.

After the first quarter ended, Devan flew out here! Although he came in pretty late, the next morning we were leaving for a road trip. He was still pretty jet lagged so his sleep schedule was a bit off, but I think it worked out :P We went with two of my friends from school: Jonathan who's half French half Swedish (but grew up in France) and Flow who's German. Flow had driven up here from Germany so we took his teeny car. We barely fit as long as some people had luggage on their laps. We first drove to Kalmar where we got to see this beautiful castle:



*Pictured here is one of the best preserved castles in Scandinavia: Kalmar castle. It was built on the border to protect from Danish invasions.*

It was the first castle either me or Devan had seen and it was fantastic. You could still see cannonballs lodged into the walls. Our European friends thought it was kinda funny that we hadn't seen castles before. We spent the night just outside of here in the countryside in this cozy little shack behind someone's house. When we pulled in the driveway my phone fell and broke, so I'm pretty lacking in photos for this part but I messaged my friends

again and I'll get the pictures out as soon as I can. On a side note, this was the longest I'd gone without a phone in a long time and it was a pretty grounding experience. On top of that, when my replacement finally got here I had issues connecting it to the network so I was without a phone for about a month. It was pretty hard, but also nice to know that I can still survive without it :)

After the castle, we proceeded down to Malmö which is the third biggest city in Sweden and is right on the border of Denmark. We explored the coast and city a bit before spending the night in another AirBnB. This one was really strangely decorated, but clean so it was alright. I'll see if I can find some pictures for all of this when they come in. The next day we crossed the bridge into Copenhagen.

This was probably the best part of the trip. Copenhagen was gorgeous and we had a really nice AirBnB. It was a penthouse apartment with a kind of modern rustic feel to it. The guy was super friendly and gave us suggestions on where to go. All over the city were these stations to rent/return bikes. The bikes had electrical pedal assistance and a touch screen gps so they were perfect to ride around and visit all of the tourist-y stuff. It was an awesome experience. So we rode around seeing churches, guards, old buildings, and a statue of the Little Mermaid. (again, will send pictures!). We also went down to the famous pier with the colorful buildings and a cool hangar-food market thing.



*Not my picture*

We spent two nights in Copenhagen before heading back. I also got the chance to drive over here during this trip (a US license is valid here!). The hardest part was actually using the manual transmission haha. There were a few rough starts but I got better as time went on. Once we got back, Devan and I spent a day or two unwinding before checking out Stockholm's famous attractions: like the city hall (where the Nobel Prize dinner is held) or the Vasa museum (a near perfectly preserved ship from the 1600s). We also went up to the tallest point in Stockholm and got some great photos there. There was also this cool viking themed bar we went to with the decor and food and everything.

## Second Quarter

This quarter was pretty similar to the last one but actually continues until the middle of January! This means that I actually have homework and studying to do over break... As for classes I continued in Swedish, and machine learning and began a computer security course. Although this quarter had even less coding than before. It was almost entirely theoretical.

## Halloween

For Halloween Swedes don't celebrate like we do. There is some amount of costuming or trick-or-treating but this is mostly from American influence. Instead they visit graveyards and place candles. [Here's my trip to the biggest graveyard in Sweden](#) (<https://goo.gl/photos/UmHKZs4YngNr1oFo7>) .

## Thanksgiving



*Thanksgiving Selfie!*

Photo Album (<https://goo.gl/photos/1RScy8KWUgv2KE7R6>)

Nobody here had ever celebrated Thanksgiving. Knowing this, I had to throw the best Thanksgiving I could. This was made pretty hard since I couldn't find the right stuff: poultry seasoning, egg nog, or even a turkey. I ended up making a lot of stuff from scratch, which was a lot of work but turned out pretty nice. (I especially like the egg nog!). I ended up having two dinners to fit everyone in my tiny apartment and it was a lot of fun. During the first one I actually had a turkey thawing in the bathroom shower, so I had to warn the guests about that.

# Winter



### *My apartment building in the snow*

This year we got an unusual amount of snow pretty early into the year with about a meter in November! It was incredible. Luckily I was never on the roads since I take the metro everywhere. Most of the Swedes said that this was pretty strange. For Christmas, the Swedes have a couple of unique things for Christmas.



First of all they have two Christmas drinks: julmust and glögg. Julmust is kind of like a root beer, but not quite and not as sweet. It's a very unique flavor. Glögg is a spiced Christmas wine, either alcoholic or not, and usually served hot. Both are pretty tasty. Then they also have a Christmas gnome called the jultomte. Before Santa, these were the guys that brought gifts on Christmas. Before them, the pagans had a Christmas goat (<https://www.youtube.com/watch?v=-zjJpFYtx9s>) that brought gifts. They also have a tradition on December the 13th called Lucia (<https://sweden.se/culture-traditions/lucia>). We went to a Christmas market with a church and saw it there. I wasn't allowed to take a video of it, but here's something of what it was like: Luciatåg ([https://www.youtube.com/watch?v=g\\_nqYSIcDBw](https://www.youtube.com/watch?v=g_nqYSIcDBw)). The market was really cool, with a very traditional aesthetic and a homey feel. A very Swedish experience. They had whole stalls for pickled herring!

# Paris



[Photo Album \(https://goo.gl/photos/RnkMUaLe6xaNCxS18\)](https://goo.gl/photos/RnkMUaLe6xaNCxS18)

I spent this last week visiting Paris, getting home just as it turned to Christmas Eve. I got very lucky with this trip because it wasn't planned until a few weeks before leaving. My friend Eléonore lives there and invited me down a while ago. Then I just happened to find a round trip flight for just over 36 dollars! I ended up spending more money on bussing to and from the airport than the flight haha. There were also several French students from my classes on the same flight who helped me through the airport and gave me wifi to call Eléonore. Once I was there it was a lot of fun. We saw all of the main tourist attractions like Notre Dame, the Louvre, and of course the Eiffel Tower. Because I was staying with Eléonore I got to have a bit more authentic French experience by hanging out with her friends and family, staying in her apartment, and having a French speaker to navigate for me. I would have been completely lost without her. I also got to try a bunch of French foods like baguettes, cheeses, wines, crepes and snails. We also spent a day up at the palace in Versailles where the French aristocracy lived until the Revolution. Also, since I live in Sweden with official documentation, I am technically a European resident under

26 so I get to go to just about any historical site in Paris for free! It was an incredible experience that I'm so grateful for. I hope to go back soon to spend more time in the museums since we barely scratched the surface of them.

# Uppsala



*A viking rune in Uppsala*

Photos (<https://goo.gl/photos/oi6XUD2RU6qyNHa58>)

I also visited a town just North of Stockholm called Uppsala. It's a smallish college town, but very old. It used to be the center of Swedish royalty and religion. The first college in Scandinavia was actually founded here to train priests for the cathedral. As such, I visited the cathedral and palace and wandered around, and of course danced too. There are also viking runestones scattered through the town. Devan and I came to visit the same things, so when I get the photos I will add them to the road trip section! I actually have a friend from Seattle who is studying here, so he showed me around, and then I used the same route to show Devan. This was the first cathedral I'd ever seen, and it was pretty jaw-dropping. Furthermore, this cathedral is the burial site of the first king of Sweden. Funny note about the cannons in the album: the palace and cannons were built when kings and

nations were beginning to become more powerful than the church, but not quite yet. So when the king built this castle on the hill next to the church he had a row of cannons built to permanently face the cathedral to remind them who had the guns.

# Hobbies

Here's a small compilation of things I've been doing for fun!

## Dancing



*Clip from a demo at an event I was at. These are two of my favorite dancers in the world!*

Dancing has been amazing. The Stockholm swing dance scene seems to be much smaller than Seattle, but I think a bit better on average. (I think this is because there's a much higher amount of beginners with a high turnover rate in Seattle) There were also several dance weekends and events that I've been lucky enough to attend. My dancing has changed since I've been here, taking on a bit of a Swedish "accent". I'll also be attending a huge event from the 26th to New Year's called The Snowball with dancers coming from all over the world!

## Brewing



*A glass of our home brewed beer*

While here I've also started brewing beer with my friends! One of them is Bavarian and has some experience and knowledge of brewing so he's been helping us through the process. We bought a large coffee roaster to boil the water and malt in, as well as a kit for the fermentation barrel and measuring equipment. For bottles we try to reuse and recycle bottles as much as possible, grabbing some from the recycle bins around here and cleaning them about, but we also bought a few really large bottles in case the recycled bottles aren't enough. So far we've been buying pre-made malt which means we don't have to mash and boil the grains and plants, making the whole process much easier. We did build our own cooling pipes though out of some copper pipe from a hardware store. So far we've finished two batches, an IPA and a Bavarian wheat beer. The IPA was kind of bad at first, but as we let it mature it got much better and is now one of my favorite beers. The Bavarian one turned out very weak (with around 2% alcohol) and tasty kind of bland or watery to me, but the Germans loved it. We have another IPA that's bottled and waiting now that should be ready very soon. Devan also helped out with the Bavarian one a bit, getting to bottle and try some while he was here :)

## Food



*One of the first batches of bread made*

Photos (<https://goo.gl/photos/KemEtXfNwSvEjkMC8>)

I've also picked up baking a bit here. I read about a new bread recipe which doesn't require any kneading so you can simply stir the ingredients, let sit, and then you have dough for baking! So I bought some flour, yeast, and salt as well as a baking stone and gave it a shot! It was ridiculously easy and tasted very good so I'm trying to not buy any pre-made bread for a while to make sure I do this more often. Since bread dough and pizza dough are quite similar, I've started making pizzas from scratch too. It's a great thing to do with friends too and tastes pretty good. The international friends here have been introducing me to more foods as well, making crepes, fondue, schnitzel or cookies! My palette has definitely changed since I've been here haha.

## Tech Stuff

I just bought a website while typing this up actually! I originally intended for this email to be sent out via a fancy decorated email, but as that proved more and more difficult, I realized having my own domain would be quite useful! Furthermore, it's only going to get harder and harder to find a good domain name, so I went for it. [grose.in](http://grose.in) ([grose.in](http://grose.in)) will soon be up and running, with this page on it! So eventually, I'll simply be linking you to that webpage for these updates. In other news (more technical for those who are interested), I've finally made the switch to Linux and couldn't be happier. It's just so clean and well made. And it still has that new car smell... Or new install smell I guess. But I still have a dual boot into windows if I need it, but I haven't done so once since the install. With this, I switched to Atom as my text editor, and it's also working out quite nicely. The markdown preview is gorgeous and I've been using markdown a lot more as a result (including this page!).

# Signoff

And now we're finally done! Whew. This email took me much longer than I anticipated (several many hours actually) and is at least partially due to me getting too ambitious with new tech stuff. Hopefully all of it works out, and I hope you all enjoy reading it!

Love you lots and Merry Christmas!

Ryan

