

DAAD Summer 2015: Final Report

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When I first considered going to Germany for a summer, my main reason was for a change of pace. Growing up along one of the States' two busyness-obsessed urban coasts as an overachieving science and music student, I had inadvertently gotten sucked into a culture that didn't know how to save time for the important parts of life. When friends advised me that during their internships in Germany their coworkers arrived at 9 and the office was empty by 5, my interest was piqued: I wanted to learn how Germans balanced their work with their life so well. It seemed functional—or, at least, their economy didn't seem to suffer because of it.

I was drawn too to the prospect of exploring Berlin. My previous three-day visit had been with a symphony, and during that time I'd gotten an impression of Berlin as treasure trove for classical music, European history, and unusual architecture. Additional conversations with my friends had told me that I had missed the best part: Berlin's refreshing real estate prices made possible a profound counterculture devoted to living affordably, sustainably, and authentically. As cities in the U.S. rapidly gentrified, I wished to see how this culture of resistance outside the U.S. was faring.

I found my opportunity to go to Germany through DAAD, when I learned of a physics internship available at the Helmholtz-Zentrum Berlin. My soon-to-be PI was building an instrument to measure material properties to assess their suitability for use in photovoltaic panels, which wasn't terribly interesting to me, but he was working in experiment with femtosecond lasers, which for me was vaguely interesting and totally new. I decided the opportunity was worth it—and I'm really glad I did.

The research turned out to be fascinating, though at first I didn't realize it. My project was to write a

GUI for my PI's experimental setup, which would enable the experimenter to control all the devices from a single computer. The project itself was at worst bearable, at best an opportunity to learn a bit more about coding, and in general only tangentially physics-related. However, after several weeks of sitting in front of a computer writing code all day, I was surprised and gratified when my PI proved how much he cared about teaching me what it's like to work in a laser lab. He showed me that the dull red spot from the laser, far from being boring, in fact concealed thousands of micrometer-thin slices of high-intensity light every second. He showed me how these pulses could be focused to blistering intensities through a piece of sapphire so that the photons, which initially all had the same deep red color, were converted into the techno club of lasers: dancing, multicolored light came out the other side, still packaged into thousands of wafers every second. My mind was totally, irrevocably blown. Moments like this interspersed with the everyday coding made for overall a valuable experience.

Although my internship was with the Helmholtz-Zentrum Berlin, which is a company, I didn't really get a sense for the company or for corporate work in general. Most of my time was spent in the lab with my PI or with other people from the same research group, and the product that the company ultimately produced was many stages of development down the line from the work I was doing, which meant my experience was more like that of a graduate student than of a company employee. The sense I did get regarding my company was mostly that it was big and as a result pretty hierarchically structured. The people were nice though; I hung out with many of my colleagues outside of work (including for one chamber music session!) and had a lot of fun. Importantly, I found that the work-life balance at my company was less prevalent than I was led to believe and, where enforced, more haphazard: due to the demands of the German research job market, students and group leaders tended to work long and irregular hours, just like in the U.S. However, my PI was careful to let me know that he expected only the 9-to-5 out of me, since this was an internship with a company—so at least the long hours were undertaken conscientiously.

Outside of work, I had a great time exploring Berlin. I did get to return and see the Berlin Philharmonic in concert: once the full orchestra, and once just the horn section, both of which were a lot of fun. More significantly, I got to explore the aspects of Berlin afforded by its affordability: the street performers, the street artists, and the open culture. One highlight was visiting the street artist colony on Teufelsberg, learning its history, and getting a sense for the anti-consumerist argument that justified its founding. In comparing the lifestyle that its artists advocated against the gentrified reality of neighborhoods like the Prenzlauer Berg, I learned that Berlin is not free of the class divisions that have been splitting richer cities since the rise of re-urbanization. At the same time, the community-run gardens from locations as undeveloped as Tempelhofer Feld to those as gentrified as the Prenzlauer Berg itself testify to the cooperation between citizens that a low-income, permissive-by-necessity city government can foster irrespective of the classes of the cooperating citizens. While the class divisions were familiar to me, the widespread civic-mindedness evident in traditions like this one were unfamiliar and fresh. I return to the U.S. with new visions for the possibilities of life within a capitalist society.

My time in Germany left me with a wealth of new experiences and an appreciation for the diversity of experience in the developed world. I wouldn't have missed it for anything.