DAAD Rise Internship Report
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I am a senior studying Mechanical Engineering at the University of Hawaii at Manoa. This summer, I had the unique opportunity to immerse myself in an enriching internship experience through the RISE Program in Germany. As I reflect on my journey, I would like to offer insights into various aspects of my stay and the academic research I undertook.

Navigating Germany: Accommodation, Banking, and Transportation
Upon securing my internship, the immediate challenge was to find suitable accommodation. In Germany, the popular choice for students seeking both short and long-term stays is the app WG-Gesucht. While it's an excellent platform, it is essential to be cautious of potential scams. My advice is to ensure direct communication with potential roommates and, if possible, delay any rent payments until after you've arrived and seen the accommodation firsthand.
Banking in Germany requires some foresight. Many banks require a local address to open an account, which emphasizes the importance of securing accommodation early on. Opt for an online bank that can be set up before your arrival.
Regarding transportation, the German government offers the "Deutschland Ticket," a cost-effective monthly pass that covers all regional transport in the country. It's a bargain at 49 euros, but ensure you capitalize on its full value by purchasing it at the beginning of a month.

Research Experience: A Deep Dive into Computational Catalysis
My research was rooted in the domain of exhaust aftertreatment via heterogeneous catalysis. This technique is primarily used in catalytic converters of vehicles. Our objective was ambitious: to identify new catalysts that could potentially reduce or entirely bypass the need for platinum group metals, which are both expensive and scarce.
What stood out about this research was its computational nature. We employed Python to simulate each catalyst and conduct surface calculations. This computational approach provided us with a clear direction and narrowed our focus before the more resource-intensive experimental phase.
On a typical day, I would work on code - crafting new scripts or refining existing ones as per my supervisor's guidelines. Much of my work centered around calculating the surface energy of the catalysts under consideration. Additionally, generating convex hull phase diagrams was pivotal in determining the catalytic behavior of the surfaces.

Personal and Academic Highlights
The internship wasn't just about work. The weekends were an open ticket to explore the rich culture Europe had to offer. I traveled to various countries, indulging in diverse cultures, cuisines, and experiences. On a personal level, the people I met formed the bedrock of my

European sojourn. Interacting with individuals from different corners of the world broadened my horizons and enriched my understanding of global perspectives.

Recommendation for RISE

The DAAD RISE program is a blend of academic rigor and cultural immersion. I wholeheartedly recommend it to anyone seeking to enhance their academic trajectory while simultaneously broadening their cultural understanding. While I was a bit apprehensive to partake in research I had very limited knowledge of, my supervisor's guidance, patience, and willingness to answer my myriad questions significantly contributed to my learning curve.

Moreover, interacting with other RISE interns added layers of diversity to my experience. The stipend provided by the program alleviated the financial stress of living abroad, allowing me to immerse myself fully in both my research and the unique cultural offerings of Germany.

In summary, my summer with RISE was a collection of academic growth, cultural exploration, and personal development. It's an experience I will cherish and draw from in the many phases of my future endeavors.

I agree that my report and accompanying pictures may be used by the DAAD in printed materials, presentations, and on websites in order to inform funding organizations, sponsors, and students about the RISE program