Angela Reisch

French International **Engineering Program**



5th Year 6ni or c Fnch i ad Mhainica Eineering

r sité d Ennologie el Compiègne

SPRING 216: hernship a shider Mâcon, Fance

Re-industrialization of medium voltage nuclear circuit breaker.

The University Host:

Compiègne is a small city located about an hour north of Paris. There is a small downtown area, and the students make up a large percentage of the population. All the classes are taught in a lecture-recitation style. Each week there is a large lecture with all of the students and also a meeting with a smaller group. Each course that I took had a required presentation and a final exam. It was nice that the grades were not based solely on exams, especially considering the language barrier.

Life in Your Country:



During my internship I was living in Lyon and taking the commuter train to work every day. France is very well connected by rail, and I enjoyed traveling around the country by train. It took me a while to get used to the French daily schedule, including the store closings for lunch time and on

The Host Company:



Centre Ecofit Mâcon

Schneider Electric is an international energy company.

During my internship, I worked alongside a team of engineers on a project in the nuclear energy sector.

The Project:

The project focused on the re-industrialization of a medium voltage circuit breaker for nuclear applications. This product had stopped being produced by Schneider Electric in the 1980s but is now reaching the end of its working life. As part of the re-industrialization of this product, I was in charge of verifying that the materials meet new regulations as well as old specifications, and creating a control documentation for the approval of parts ordered from outside suppliers.

Impact:

The IEP has provided me the opportunity to pursue a global degree in engineering. In our increasingly connected



world it is more important than ever to be multilingual. During my experience in the IEP, I not only lived in France, but I met people from all over the world. The experience that I gained during my six-month internship gave me a better idea of the type of work I want to pursue and the field I want to go into after I graduate. Above all I have gained confidence in myself as a result of my experiences living and working out of my comfort zone.







Ethan **McClure**

Japanese International **Engineering Program**

EthanMLMcCLure@my.uri.edu



FLL **0**5: **t**/>ng Percher a taleTolop Inste of **Technology**

SPRING 216: hernship a Sindzu **p**a>on Designed components of digital control systems.

東京工業大学(Tokyo Institute of Technology):

As the first Japanese IEP student, unlike most IEP students, I did not take classes at Tokyo Tech. Instead I worked in a research laboratory designing a metamaterial consisting of an embedded nanoscale split-ring resonator in an organic substrate. Capable of creating a negative refractive index in a section of the visual spectrum, a step along the road to invisibility devices.

Outside of research I lived in a student dormitory in the heart of Tokyo, Shibuya. Friends and I spent long days, and often long nights, exploring every corner of the city. Ending up at sushi bars and zazen mediation centers alike.

Life in Japan:





With almost 14 million people, Tokyo is the most populous metropolitan area in the world, in fact consisting of 23 separate wards (i.e. cities). There are endless temples, museums, restaurants, bars, and karaoke clubs to find and visit.

Kyoto on the other hand is a serene city filled with temples and shrines. The former ancient capital maintains a more traditional Japanese lifestyle.

株式会社島津製作所 (Shimadzu Corp.):



Shimadzu, first established in 1875. primarily designs and manufactures precision instruments, analytical instruments, and medical equipment.

My internship helped the company develop a new product and broadened the ongoing international outreach.

The Project:

For my internships I helped to design a control system for a particular part of a Fourier Transform Infrared Spectrometer. Using an elliptical fitting method, implemented in firmware, I increased the accuracy and speed for a set of parameter calculations. In addition, I designed a digital filter for a separate control system, which removed oscillations caused by physical movement.

Impact:

This year helped me grow both personally and professionally. Offering me a view of both innovative technology



and an extraordinary culture comprised of delicious food, beautiful architecture, and welcoming people. I improved my Japanese greatly, I enhanced my understanding of electronic materials and digital control systems, and I learned how to manage the intricacies of life in a new country.

Through this experience I now feel prepared not only to embark on intensive graduate studies and a professional career in quantitative research, but also to adapt to new cultures, situations, and circumstances. I'm sure this year will influence how I think about the world for the rest of my life.







THE UNIVERSITY OF RHODE ISLAND

Alex Mendoza



Spanish International Engineering





5th & ar Spnior, Sannsh a divil Egi re1ering A

FLL 05: Siied a Westidad $\overline{\mathbf{U}}$

SPRING 216: rernship a ⊕€O Copper bf C ile m SanHago, C ile

School of Study:

Universidad de Cantabria

 M□N·· → → □□&; □□· □ · □ → N·· → N·· ∞□· · □□ · ₩/·

Life in Your Country: Spain & Chile



30€ XIIO · WINS♦ · SNISNENI• · SII ⊕ · . S• N•□O N•N•627• S•638 □ O H•• S•64•□ •

⊱∥<mark>□♦♦∕₽ः • ⊕⊞ •⊜≐® у⊭(≈∙у)⊕®⊙ः ≗ • ∥ ∙⊙••</mark> 30 3### 1/6· △II(• ≈ ■ 5∞ □ ■ • · X□ □ • ♦□ ♦□ (0 «) (

The Host Company:





♦200 **•** □ **•**240 •

Project Management/in a Mining The Project: Company

· \$ \$ \$60.00 \nabla 0 \nabla

Impact:

† H♦m□♦♦· ⑤· ♣□♦∅♦⋒ M⊠□M□HN■ MM≗·♦≈M·∂M•♦·⊠M◎□•









Jeffrey Costa

Spanish International Engineering **Program**

jeffrey_costa@my.uri.edu



dad d Marrat (tecnun) FL Le 25: Sin

SPRING 216: hernship a blon ill cturing I tegenœ Vitoria-G steiz, Spain

White light robot operation and fixture designs.

Universidad de Navarra (TECNUN):

The Univeridad de Navarra is a technical university for engineers located in San Sebastian, Spain, TECNUN offers a variety of engineering courses ranging from pneumatics and hydraulics to computer simulation. All the professors are very knowledgeable and willing to help their students succeed. Each engineering course is hands on and in a small group with the professor. TECNUN also offers general education courses such as the courses anthropology and European expansion. These classes were slightly larger but the professors still showed a interest in their student's

Life in Spain:



Life in Spain is one where people want to enjoy life. San Sebastian is a popular resort town in Europe known for its famous beach "La Kontxa" and its world renowned pintxos.

Vitoria-Gasteiz is a smaller city south of San Sebastian that was the Green Capitol of Europe due to its many gardens and parks throughout the city. The city is protected by mountains on all sides, perfect for hikers.

The Host Company:



Hexagon

Hexagon Manufacturing Intelligence is a global and growing company that specializes in Metrology.

Here I worked under the head mechanical engineer in the design and operation of white light metrology robots.

The Project:

Throughout the internship experience I had three main projects:

•Programming the white light robot to measure parts and create a demo in order to show the capabilities of the robot to interested companies.

•Design of fixtures to hold car parts for Volkswagen's new manufacturing plant.

•Design of parts for white light robots to specify a customer's requirements.

Impact:

The IEP program has without a doubt changed my life for the better. After my year abroad my eyes were opened to the



fact that there is more out there in this world besides New England and after this experience I want to experience it all. I have made friends in over twelve countries and visited four countries where I have experienced new and different cultures. After experiencing how different these cultures are from one another, I have a newfound respect for people from various cultures.

Professionally, I have now opened myself up to greater opportunities to work for companies with Spanish/Latin American partners because I have a better connection to their language and culture.







UNIVERSITY OF RHODE ISLAND

THE **UNIVERSITY** OF RHODE ISLAND