

(For JSPS Fellow)

Form B-2
(FY2018)

Date (日付)

22/06/2018 (Date/Month/Year: 日/月/年)

Activity Report -Science Dialogue Program-
(サイエンス・ダイアログ事業 実施報告書)

- Fellow's name (講師氏名): Andreas Orthey (ID No.P16701)

- Participating school (学校名): Takezono Highschool

- Date (実施日時): 12/06/2018 (Date/Month/Year: 日/月/年)

- Lecture title (講演題目): Life in Robotics Research

- Name and title of your accompanying person (講義補助者 職・氏名)

- Lecture format (講演形式):

◆Lecture time (講演時間) 50 min (分), Q&A time (質疑応答時間) 40 min (分)

◆Lecture style (ex.: used projector, conducted experiments)

(講演方法 (例: プロジェクター使用による講演、実験・実習の有無など))

Presentation slides on Projector

- Lecture summary (講演概要): Please summary your lecture 200-500 words.

The lecture was split into two parts. The first part was titled "How to become a researcher". I talked about my life growing up in Germany, and I told them about turning points of my life which influenced my decisions to become a robotics researcher. I talked about the difficulty speaking english while graduating, and how I overcame it. The second part was titled "Robotics Research" and was focused on current development in robotics. I talked about the motivation of robotics: Automation, Dangerous Tasks and Bringing Science Fiction Concepts to Reality. I showed videos of what robots can do, and how robots fail to do tasks which are assumed to be easy for humans. I argued that the main problem of robotics lies in Software, in the development of algorithms to make robots move through and perceive their environment. I show-cased two topics from my research. First, Interactive Perception, where we computed the structure of objects by interacting with them. Second, Motion Planning, where we developed algorithms computing a motion between two configurations of a given robot in a given environment. I finished by telling the students about dangers of developing AI, and the chances of a robot takeover. In the subsequent discussion, we explored several interesting questions from the students, like "how could robots help battle famine", or "will robots take away all the jobs from humans?"

- Overall advice or comments to future participants in the program (今後の講師へのアドバイス):
Many students were not able to completely follow the lecture because their level of English proficiency was not high enough. It would be advisable to tone down the difficulty of the lecture, probably using simpler words or trying to explain concepts with more analogies.

It might be good to provide a handout, such that students struggling could at least take something away from the lecture (I did not provide a handout).

- Other noteworthy information (その他特筆すべき事項):

The teacher inviting me (Kazuhiro MIYAUCHI) was very enthusiastic about my lecture, he hung up posters outside the classroom in advance, and distributed flyers to make students interested. He was very polite and helpful throughout my visit. His students even wrote a welcome message to me on the blackboard. I felt really welcomed by him and his students and I am very happy to have participated in this event.

- Impressions and comments from the accompanying person (講義補助者の方から、本事業に対する意見・感想等がありましたら、お願いいたします。)

Must be typed