

Welcome to the **HIRO Group** at the University of Colorado Boulder!

The goal of our research group is to develop technologies for robots to work with and around people. We work at the intersection of a variety of different fields, from algorithms to control to social and cognitive psychology. As such, to successfully achieve our goal, a concerted team effort from a diverse group of individuals is required and we look forward to having you on the team. This document outlines important values, rules and expectations of myself as a mentor and of you as a part of the lab team. Please keep in mind that this document, or any modifications of it, is confidential and it is not to be shared with a third party.

## Advising agreement between graduate student and faculty

I strive to create a community where professional growth and development thrive. As a team, we seek to maintain a participatory culture in which **all voices matter**. Sharing your opinions, ideas, and experiences in a respectful way is critical to moving science forward, and to improving the quality of life within the HIRO Group!!

### 1. Graduate student commitment

In my role of lab director, I am expected to write grants and initiate research that will make tangible contributions to science, academia, and society at large. Most importantly, part of my job as a Professor is to train and advise students. I must contribute to your professional development and progress in your degree. I will help you set goals and achieve them. However, I cannot do the work for you. In general, I expect you to:

- Learn how to plan, design, and conduct high quality research
- Learn how to present and document your scientific findings
- Be honest, ethical, and enthusiastic
- Be engaged within the research group
- Treat your lab mates, lab funds, and equipment with respect

- Take advantage of professional development opportunities
- Obtain your degree
- Work hard—don't give up!

### 1.1 You will develop strong research skills

- Take advantage of your opportunity to work at a world-class university by developing and refining stellar research skills. I expect that you will learn how to plan, design, and conduct high quality scientific research.
- Challenge yourself by presenting your work at meetings and seminars as early as you can and by preparing scientific articles that effectively present your work to others in the field. The 'currency' in science is published papers, they drive a lot of what we do and because our lab is supported by taxpayer dollars we have an obligation to complete and disseminate our findings. I will push you to publish your research as you move through your training program, not only at the end.
- Keep up with the literature so that you can have a hand in guiding your own research. Block at least one hour per week to peruse current tables of contents for journals or do literature searches. Participate in journal clubs. Better yet, organize one!
- Maintain detailed, organized, and accurate laboratory records. Be aware that your notes, records and all tangible research data are property of the lab director. When you leave the lab, I encourage you to take copies of your data with you. But one full set of all data must stay in the lab, with appropriate and accessible documentation.
- Be responsive to advice and constructive criticism. The feedback you get from me, your colleagues, your committee members, and your course instructors is intended to improve your scientific work.
- At times, you will be tasked with contributing to grant proposals. When that happens, you should consider this activity to be of the highest priority, and you should put aside other duties to do your best in helping out with this, as successfully getting grants is crucial to our mission and has a direct impact your PhD career in terms of funding, travel, and research equipment.
- Feel free to request me to pass along documentation relative to my grant applications. Said documents can be used as inspiration for research ideas, and as a template when writing grant applications. Suffice it to say, they are to be kept confidential.
- *Be strong!!* It is OK to make mistakes, as they are an important part of your training. Robotics is extremely complicated, and this can sometimes translate to a lot of pain in your day-to-day activities. In addition, pursuing a PhD is one of the most excruciatingly complex things you will achieve. At times, you may feel discouraged, frustrated and you may want to give up. Remember that it's perfectly normal and the vast majority of students have experienced it, but most importantly *have been through it*. Furthermore, I am more than happy to share my perspective and experience about it and help you out in moments of difficulty: I was in your exact situation not so long ago.

### 1.2 You will work to meet deadlines

- Graduate studies are deadline-oriented, and **deadlines are not to be missed**. It is your primary responsibility to work toward, apply to, and successfully publish work in relevant conferences and journals in the field. I expect you to work your best to maintain these goals.
- Be aware of and plan for any deadline for your research. It is unlikely that you will be granted time off before any of these deadlines. Please discuss plans for conferences with enough time in advance so we can begin preparing and developing plans for success.

- Be mindful of the constraints on my time. When we set a deadline, I will block off time to read and respond to your work. If I do not receive your materials, I will move your project to the end of my queue. Please do not assume I can read materials within a day or two, especially when I'm traveling.
- List of key deadlines in the field:
  - Fall: ICRA [mid-September], AAAI [mid-September], HRI [mid-October]
  - Winter: RSS [end of January], IROS [end of February]
  - Summer: CORL [beginning of July]

While you will be publishing the majority of your work in the aforementioned venues, some exceptions can be made for specific work that is targeted toward different communities [e.g. ICML or NeurIPS for what concerns machine learning, or AAMAS for what concerns multi-agent systems].

- Expectations in terms of research productivity within our lab:
  - *Okay job*: one 1st-author conf. paper per year
  - *Good job*: one 1st-author conf. paper per year + some 2nd- or 3rd-author publications
  - *Outstanding job*: two 1st-author conf. papers per year + eventually some 2nd- or 3rd-author publications
  - *Better-than-me job*: not possible!! Just kidding: my job is exactly to get my students to be better than me!

With that said, please bear in mind that the aforementioned guidelines are a **rule of thumb**, and they depend on a number of variables: seniority of the student, complexity of the research that is carried on, type of employment [TA vs RA and so on], relevance/impact factor of the conference/journal that is published, and so on.

### 1.3 You will take ownership over your educational experience

- Acknowledge that **you have the primary responsibility for the successful completion of your degree**. This includes commitment to your work in classrooms and the laboratory. You should maintain a high level of professionalism, self-motivation, engagement, scientific curiosity, and ethical standards.
- As long as you are meeting expectations, **you can largely set your own schedule**. There is to be a balance between time spent in class and time spent on research and perhaps on outreach or teaching. It is your responsibility to talk with me if you are having difficulty completing your work and I will consider your progress unsatisfactory if I need to follow-up with you about completion of your research or coursework.
- Ensure that you meet regularly with me and provide me with updates on the progress and results of your activities and experiments. Make sure that you also use this time to communicate new ideas that you have about your work and challenges that you are facing. Remember: I cannot address or advise about issues that you do not bring to my attention.
- At the beginning of each semester [Summer included], you should arrange weekly one-on-one meetings with me. Said meetings should be at least 30 minutes long, but you can request longer meetings if needed.
- If you want to discuss work performed by a student you are supervising, feel free to have them come to the meeting as well.
- Be knowledgeable of the policies, deadlines, and requirements of the graduate program, the graduate school, and the University. Comply with all institutional policies, including academic program milestones, laboratory practices, and rules related to safety.

- Ideally, before the end of October we should have discussed your plan of study. Discussing your course selection before you start the PhD program is also highly recommended.
- Actively **cultivate your professional development**. University of Colorado Boulder has outstanding resources in place to support professional development for students. I expect you to take full advantage of these resources: part of becoming a successful engineer or scientist involves more than just doing academic research or technical work. With respect to your networking skills, you are expected to make continued progress in your development as a teacher, as an ambassador to the general public representing the University and your discipline, and as an engaged member of broader professional organizations. Various organizations on campus engage in science outreach and informal education activities. Attendance at conferences and workshops will also provide professional development opportunities. When you attend a conference, I expect you to seek out these opportunities to make the most of your attendance. You should become a member of one or more professional societies such as the IEEE or RAS.

## 2. Faculty advisor commitment

My goal as a mentor is to support and empower each team member to articulate and achieve her/his goals within the team's vision. As a mentor, in order to help set you up for a successful career, I am committed to helping you develop the professional skills needed for a successful career in industry and/or academia. I can help you achieve success along your chosen career path through identifying and helping you pursue the right opportunities.

- **My success is your success.** It is my responsibility to facilitate your training and professional development to the best of my abilities. In this role, I will work with you and your committee members to develop an education and research plan that best prepares you for both training and career goals.
- **I will work tirelessly for the good of the HIRO Group.** The success of every member of our group is my top priority, no matter their personal strengths and weaknesses, or career goals.
- **I will be your advocate.** If you have a problem, come to me. I will do my best to help you solve it.
- I will use my own skills and experiences as well as faculty and department resources to **assure that you receive sufficient opportunities to become an expert in your chosen research area.** I will also help you develop your personal research network and help support your independence as a scholar and researcher in accordance with your experience.
- **I will encourage you** and will help foster opportunities for you to engage with the research community. This includes alerting you to and assisting you to find internship and fellowship opportunities, opportunities to present and disseminate your work, collaborative opportunities, and outreach and engagement.
- I will engage in **open communication and periodic formal performance reviews** to ensure that the expectations of both parties are met. I will provide open and honest feedback to help you develop your identity as a researcher. Faculty mentors can be expected to maintain a relationship with the student that is based on mutual trust and respect. I will always make time to discuss any concerns that you have about our working relationship to this effect.
- I will progressively encourage you to **reach independence** by increasing your responsibilities as you progress through the graduate program. This includes responsibilities to the lab, Department, and

University, but also opportunities to engage in the classroom or outreach or with collaborators in an increasingly independent role and to mentor other students in related research projects.

- I will uphold and promote the **highest ethical standards** when conducting research and engaging in scholarly activities (written, oral, etc.). I will clearly define my expectations for conduct within my team and comply with all federal and institutional regulations for human subjects and animal research. I will also make myself available to discuss ethical concerns in a confidential manner as they arise and expects students and staff to bring these issues to my attention in a timely manner.
- **I am willing to support you throughout your professional life.** I recognize that the role of a mentor continues after the completion of graduate training, and students can expect me to be committed to being a supportive colleague as they transition into new stages of their career. In this role, I may provide letters of recommendation, serve as a job reference, provide unbiased feedback on research challenges, help mentor more junior students, etc.
- If at any time you feel that your needs in the program are not being met or that your path to becoming an independent researcher is being unduly hindered, I will make time to discuss any such issues that I bring forward. If possible, I will work with you to create a plan to overcome or address any undue obstacles to your progress.
- I will actively respect your rights as a graduate student as set forth by the University (<http://www.colorado.edu/GraduateSchool/policies/billofrights.html>). If at any time you feel those rights are being violated, you will bring this to my attention immediately and work with me to address any challenges.

### 3. Lab policies and practices

This section is an amend-extend of the Lab Etiquette document. This document has priority over the aforementioned agreement as it targets specifically the needs of the graduate student body.

#### 3.1 Leave

- While the University of Colorado Boulder does not have an official graduate policy for personal time, Dr. Roncone understands the importance of work-life balance. As a way to accommodate emergency incidents, illnesses, etc., Dr. Roncone can readily accommodate 3 to 5 events per year, so long as these events are communicated in a timely manner and necessary adjustments are made for research projects and lab work. After the fifth instance, Dr. Roncone will evaluate the situation with the student and devise a plan with the student for continued success in light of the missed time.
- If you are sick or will otherwise need to miss a scheduled meeting or event, please email Dr. Roncone and any relevant team members to let them know as soon as possible.
- **Graduate students should follow CU Boulder Staff policies** related to vacation and sick time off. Fall, Winter, Spring, and Summer breaks do not extend to research time for RAs. RAs are expected to work over University breaks unless they have previously received permission from Dr. Roncone.
- When taking vacation, please obtain prior permission from Dr. Roncone. RAs are allowed up to 10 days per year for vacation. Exceptions to will be reviewed on a case-by-case basis.

#### 3.2 Travel

- As a rule of thumb, first authors of conference papers will always attend the relative conference and present their work themselves. Exceptions for second and third authors can be made on a case-by-case basis. Exceptions for temporary workers [e.g. Independent Study students or undergraduate students] will be handled on a case-by-case basis.

- You are highly encouraged to submit preliminary work to workshops, but acceptance of a manuscript to a workshop does not result in a publication and does not guarantee attendance to the conference. Exceptions to this rule are allowed.
- If you are being funded to attend a workshop or conference, Dr. Roncone expects you to attend all of the conference and sessions each day.
- One major benefit of the Ph.D. program is traveling around the world. You are welcome to schedule vacation days before and after the conference to take advantage of travel as the plane ticket costs will likely be covered by Dr. Roncone, meaning you will then just be responsible for the extra days preceding the conference. Please consult the University policies on booking travel for more details.
- When traveling, please keep in mind that you are traveling as a public face of the HIRO Group—and of University of Colorado Boulder. As such, you will maintain the same professionalism and respect toward others that Dr. Roncone expects from you when you are in the lab.

### 3.3 Evaluations

- All University employees, including Ph.D. students, are formally evaluated on an annual basis. Your continued funding depends on your evaluation each year. As a new student, evaluations will occur on a per-semester basis.
- When your evaluation comes, you should remember to tell me if you are unhappy with any aspect of your experience as a graduate student. Remember that I am your advisor and advocate, and I will be able to help you with any problems you might have with other students, professors, or staff.
- Similarly, we should discuss any concerns that you have with respect to my role as your advisor. If you feel that you need more guidance, tell me. If you feel that I am interfering too much with your work, tell me. If you would like to meet with me more often, tell me.
- At the same time, I will tell you if I am satisfied with your progress, and if I think you are on track to graduate by your target date. It will be my responsibility to explain to you any deficiencies, so that you can take steps to fix them. This will be a good time for us to take care of any issues before they become major problems.

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If you have any questions, comments, or concerns about this document, please discuss them with Dr. Roncone before signing. It is imperative that all parties involved have a clear understanding of the rules and responsibilities outlined here prior to agreeing to these terms.

**Please sign and date below to confirm that you have read and understand the above-mentioned guidelines.**

**Student Name [print]**

**Student Signature**

**Mentor Name [print]** Alessandro Roncone

**Mentor Signature**

**Date**