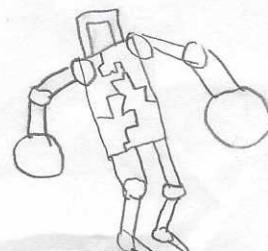
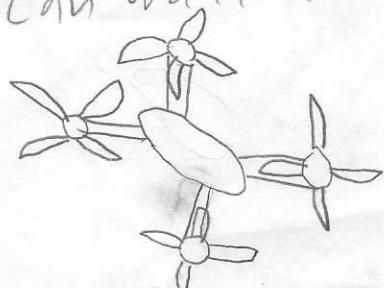


Dear Sergio and Ryan I was very interested by your talk and demonstration about robotics. I thought it was interesting how you were working on moving robots. I am on a first robotics team and had always wanted to see a robot that wasn't a square and could do more complicated things. I was fascinated by the robot that walks on one leg and can rotate by spinning flywheels on the side of its body. I have wanted to do robots but always thought I would have to do something new because I never thought about doing something that had already been done before but doing it your way. Your story about going from bio to mech engineering made me think about what other fields I might go into if I didn't like mechanical engineering. If you went I would go into electrical or computer engineering as those are the other parts that interest me. Your drone was pretty cool and I never thought you could get up to 5000 RPM. I thought you guys talked with confidence and we're really good at answering questions. Thanks for taking the time out of your day to talk to us and show us around your lab. I hope you guys have great success in your future endeavors and can build a robot assistant that can work around a house. Thanks James H



Pear Sergio, Ryan, and AMBER LAB,

Thank you for giving a presentation on the various robots robots in your lab and about the process of robotics. I came by the AMBER lab last year and its amazing to see how much progress you've made since then. I remember when you were working on the jumping bot, making a hand and had far less robots. Your presentation felt very unique. It was a great combination of personal experiences and design concepts. Recently, we went to a talk about control theory and information theory for modeling and simulating. I loved seeing something I just learned about pop up in a different field.



GO  
BEARS!

Coski

Thank you,

Gabriel Barbosa-Topeke

Dear Serigo and Ryan,

Thank you so much for inviting us to the AMBER Lab! It was so much fun being able to see all of the robots you guys are working on and learning about the progress of building the robots. Learning about all the different components that come with thinking about how to build the robot or how to make it as safe as possible was so cool and interesting. I had a fantastic time in the lab and seeing AMBER walk and how it reacts while being pushed. Once again, thank you so much for taking time out of your day to give us a tour and answering all our questions!

Sincerely,

JANET PIMENTEL

Dear Sergio & Ryan,

Thank you so much for inviting us into your AMBER LAB and taking the time to show us all the robotic research you have accomplished and are currently working on. Robotics has always been a topic/field I found very interesting yet have thought of it as very complex. You guys were able to explain everything to us in a way that was easy to understand and that introduced us to a lot of new and different concepts. All the robots were so cool, my favorite was "the hoppers". I wish you the best in your continued research, and I hope to find something I'm passionate about just like you are to robotics. Thanks again!

Sincerely,  
Sophia  
Gowans

Dear Angie and Ryan

Thank you for inviting us into your Amber Lab and showing us your incredibly amazing robots and giving us a tour of the lab and the people who work in it too, thank you to them as well.

What I loved the most about the tour was moving amber back and forth; I was kinda scared I was going to break it but it was stable and made me feel better.

My favorite robot you showed us was the Hopper or Archer, even though you guys didn't use him. The things that you guys said about what it does is still very cool and super interesting.

I hope you guys do as many robots as you want and reach your goals and more.

Thank you

Dincerely

Autiope from Da Vinci

Dear Sergio, Ryan and the Amber lab,

Thank you so much for taking the time to speak to us about your work. I loved learning about the robots and how each of you tackle problems. It was very fun to interact with AMBER and feel how it reacted with the pushes we gave. I especially enjoyed seeing the robot recently built with arms. I know the lab focuses on bipedal movement, so I was fascinated to see this robot and learn how you plan to experiment with it. It was interesting to learn about how safety is taken into account for each robot and simulations are used to keep the user (and the lab) safe. Thank you again for your time and patience in answering all of our questions!

- Elena Ruiz

Dear Sergio and Ryan,

Thank you so much for taking the time to show and explain to us the research in the AMBER Lab. It was super cool to see all the different kinds of robots the lab is designing and working on and how the research process works. I didn't realize the simulation process was so involved in the process or how creating the robot involves creating custom parts through methods like 3D printing and laser cutting metal and using whatever materials are available to you in the lab. The different ways that the different modes of movement worked like the leg's propellers or springs were really interesting, and it reminded me of other technologies and research that also take inspiration from nature. I appreciated hearing about how you come up with problems to solve and what it is like to conduct research as a PhD student and how it compares to work in industry. I also really enjoyed hearing about how different body parts could be added to the robots and how they can serve different functions like the arms and tails, or how complicated it could be to create robots that work in conjunction with humans.

Thank you again for explaining your research flows.

Best,

Adrian (From DaVinci Camp)

Dear Sergio and Ryan I'm very appreciative that you took your time out of day just to explain and show us "Hopper" and "Adam". Thank you both for answering all the questions for us; I still have a question though: Have you been able to try out the hopper on a rocky surface, example like a batch of dirt with a anthill or another form of a unstable surface, and if so what were the results; how did the robot react aswell? I really enjoyed the way "Amber" fell back, and also reacted to all the interactions. One thing I learned today was all types of engineering are usefull to robotics from eletrical, mechanical and physics. I saw a lot of interesting stuff like a geforce computer which is a really cool computer; another thing that stood out to me was the 3D printer you had in the back. The thing that stood out to me the most was the cage which when I first thought of it I thought of the Octagon. -Bryce Jones from classmate

Dear Sergio and Ryan,

Thank you so much for giving us a very interesting tour of your lab. I was in awe about everything in the lab. I really love robotics, so I was in paradise right now. I wished I had my notebook so I could sketch everything. You both taught us so much amazing things that I could barely keep it all in my head.

My favorite robot was Achillies. This was because while AMBER looked good, Achillies looked twice as good because of its arms. I unfortunately don't know enough about robotics to judge by complexities and materials, so I prefer to judge based on visual preferences. Overall, I learned so many things I never would have normally.

Thank you so much!

Sincerely,

Luke Vaca

Dear Sergio and Ryan,

Thank you for taking us on a tour of your lab. I have always had the roots of my interests in engineering in mechanical and aerospace engineering and this tour just confirmed that for me.

I really thought the balancing of the robots (both in programming and in parts) was especially interesting. My solutions in high school robotics have been a bit more simple than motorized stabilization, such as finding a nice looking rock to use as a counterweight. However, the use of motorized flywheels. It was overall an amazing opportunity and a great introduction into higher-level robotics, and I look forward to seeing robots vaulting objects and drones playing dodgeball in the near future from Caltech. Good luck on the rest of your PhD degrees!

Best,  
Kevin Vinhas

Dear Sergio and Ryan,

Thank you for showing us around the AMBER

lab and showing us what you do as Mechanical Engineers.

I really enjoyed seeing all of the robots that you two are working on. I thought that Archer looked really cool.

This chicken legged robot was very interesting and I wonder what the benefits of the backward joints are.

I was very surprised that I did not see any quadruped robots. I really liked being able to feel how AMBER would react to being pushed. Thank you for explaining the benefits of a walking robot versus a robot on wheels. Thank you for giving us a tour of your lab and the robots that you work on.

From,

Trenton Downing

Dear Sergio and Ryan,

Thank you so much for allowing us into your lab to teach and show us how the robots work. It was incredible seeing all kinds of robots can have different movements including hopping, walking, and flying. I am so glad I had this opportunity to learn and meet some of the robots. You guys are great inspirations to people who want to do mechanical engineering creating robots similar to you guys. I had a great time interacting with Amber by pushing her back and forth. I have never interacted with a robot before and being able to do it today was fantastic! I appreciate you taking the time to share your work and knowledge with us! Thank you again!

Sincerely,

Graciella Corpinteyro

Graciella  
Corpinteyro

Dear, Sergio and Ryan,

I hope you are well, I'd like to thank you for showing us around AMBER-Lab

I've been interested in robotics for a couple of years but after 4th grade my interest died down until your presentation of your work. I probably won't be able to take any classes, but I'll make sure to check in on the news regarding robotics.

I respect the work you do, as dedicating yourself into a field that is full of challenges and research is inspiring. From the robots you've shown, I was most interested in Amber and the exo-skeleton you made. I've never seen a robot walk around before so the whole experience seemed surreal to me. I'm not sure if I'll pursue anything in computer science or engineering, so it made it an even more important experience to me. Besides that I'd like to thank you guys for answering our questions and best of luck to the both of you.

Thanks,  
Matthew Zgusta

Dear Sergio and Ryan,

Thank you for taking a break from your research to talk to us about the robots you guys are working on. It was really cool to see the demonstration of the robot walking and how it would autocorrect its walking path. It was also interesting to see how all of the grad students came from different background fields, but are all working together at AMBER labs. My favorite robot was Archer because it was cool to think about the idea of getting a "pogo-stick" like robot to do a flip. That would be a great accomplishment if you were able to succeed. The work you guys are doing at AMBER labs is really important for technology of the future, like the robotic leg. so I hope you guys continue to find success and one day I can say I met the guys who created the cool new robot that is being used around the world.

- Carter Guzman