



TOUHLABRobotics
GIVING ROBOTS THE POWER OF HUMAN TOUCH

Our Story

The biggest barrier to mass robot adoption is their inability to feel the world around them – Touchlab is changing this.

We have developed a truly biomimetic e-skin technology, which allows robots to roll pens, detect slip and compensate for this, and even identify objects through touch alone. This innovation allows us to push the boundaries of what's possible in robotics.

We are applying it to grand challenges that benefit existing and unrealised markets including dexterous grasping automation, medical, and nuclear decommissioning. We are also proud to have been one of the only 15 finalist teams in the \$10 million global ANA Avatar XPrize competition, enabling teleoperated robot Avatars. Our work is enabling operators to experience true presence through a machine, allowing them to speak, hear, see, feel and touch, from a remote location hundreds of kilometres away.

After recently raising a \$4.8 million Seed Round led by one of the biggest deep-tech VC's in Europe (Octopus Ventures), we are looking for hardworking, highly original, and ambitious individuals to join our team.

We offer excellent working conditions and a friendly atmosphere within our progressive, highly regarded, and growing company. Together we aim to become one of the most disruptive companies within the field of robotics.

Position:

Robotics dexterity software and hardware systems integrator

About you

This is an exciting opportunity for a roboticist looking to learn more about the importance of tactile sensors in robotics. With a keen interest in Design and Development, you'll have the chance to work alongside and learn from our team of machine learning engineers, electrical engineers, and roboticists. You will be working on building and integrating robots that use the sense of touch to grasp and manipulate objects both through teleoperation and autonomously. Throughout your journey, you'll receive mentorship as you contribute to the development of Touchlabs' sensors, with a strong focus on R&D and cutting-edge technologies. You will also get a chance to exploit any additional (desired) skills you already have in machine learning, machine vision or simulation, and develop new skills in these areas.

You will participate in productising, developing and maturing our tactile robotics product lines, closely working with sensor and design experts to drive the development of sensors towards robotics applications. This role offers an excellent opportunity to take on early responsibilities while showcasing your work at high impact conferences, workshops and exhibitions.

Job duties

- Lead software and hardware integration of tactile sensing, dexterous grippers, robot arms and humanoid robots
- Lead development of motion planning and control systems
- Develop robot demonstrations of grasping manipulation capabilities
- Design in-house robot systems for testing and evaluating tactile sensors
- Participate in turning robotics prototypes into mature product lines
- Collaborate on building machine learning pipelines for robotics
- Present the robotics demos at conferences, workshops and exhibitions

Essential Skills

- Experience working with robotic systems (covering mechanical, electrical and software engineering)
- Developing in ROS (ROS1 and ROS2)
- Experience with motion planning and control for manipulation and grasping using tools such as MoveIt, TrajOpt, Drake, ros_control, or similar.
- Excellent software engineering skills with ability to work with and design complex software systems

- Excellent programming skills in c++ and Python
- Familiarity with containerisation, e.g. Docker
- Experience developing in Linux
- Excellent communication skills

Desired Skills

- Mechatronics and/or robotic component or systems manufacturing experience, such as grippers, actuators, sensors, etc.
- Experience with robotic system integration: software, hardware, front-end (HRI), back-end
- Expertise in computer vision
- Experience with robot manipulation and grasping using data-driven methods using tools such as PyTorch, GraspNet, PyTouch, OpenAI Gymnasium, etc.
- Experience with continuous integration and continuous deployment (CI/CD)
- Robot simulation using Isaac Sim/Gym
- Proficiency in C#
- Experience working with Unity or other game engines

Why should you apply?

- Work in our amazing, new and unique HQ at The National Robotarium - where you'll see a higher concentration of robots than (probably) anywhere else in the UK. Here you will frequently meet interesting individuals and visitors, from academics to astronauts, healthcare practitioners, investors, and other deep tech sectors from around the world.
- Alongside passionate, driven people, you'll be able to work on truly exciting and globally groundbreaking projects - not many people can say they work with robot avatars!
- You want to have a lasting impact... we're a small, dynamic company with huge opportunities to grow, take ownership and make a difference. We are uniquely driven by ethical applications - to use robotics to improve the human condition.
- Unique company trips, from the XPRIZE finals in Southern California, to conferences such as CES, TechCrunch Disrupt and top robotics conferences like ICRA and IROS!
- Our office kitchen is always stocked with snacks, coffee and beer. We'll always keep you fed and watered.
- Free company events, from movie nights to Castle Parties!

Other Startup Benefits:

- Competitive salary depending on experience between £40,000.00 - £60,000.00.
- Flexible working and a blended approach to office and WFH – we trust our team to put in the work regardless of where they are.
- Fantastic work life balance in a great and historic city (Edinburgh); with low commute times from the city centre, and reasonable costs of living.
- Significant autonomy with work and very friendly/open atmosphere.
- Good paternity and maternity leave policies.
- Bike2Work Scheme for tax off bicycles.
- Your own company PC/Laptop.
- We are happy to arrange accommodation for you and your partner during work trips abroad.
- Optional training afternoons for skills development (personal budget allocation of £1k/annum).
- Opportunity to organise events such as hackathons with the company covering food, premises, and other costs.
- Other benefits to come (e.g. EV-scheme, complementary therapy sessions, on-campus gym membership, etc.)

Our interview process

Following an initial application, successful candidates will be assessed by a multiple person committee across two interviews. The sessions will cover the candidate's ability to be successful in the role, whether there is a company-value-fit, and whether the applicant will add to our existing culture.

Our interview committee will incorporate a range of people from the team, including those from the relevant department. Any decisions made by the members of the committee will always be backed up by data from the interview, not hunches. In doing so, we are working hard to create the fairest interview process possible.

If you are interested in working with us, get in touch.

Email **info@touchlab.io** including your CV and Introduction

Visa sponsorship is available for overseas skilled workers.

We are an Equal Employment Opportunity (EEO) employer and do not discriminate on the basis of race, colour, national origin, religion, gender, age, veteran status, political affiliation, sexual orientation, marital status or disability.