# SFU ROBOT SOCCER TEAM HIRING PACKAGE



**APPLY TO BE A PART OF OUR 2025-2026 TEAM** 

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# TABLE OF CONTENTS



03

#### **Application Process**

**04 Business Team Process** 

05 Technical Team Process

06

#### **Business Team Positions**

07 VP of Internal Relations

08 Outreach Co-Lead

09 Finance Coordinator

10 Corporate Relations Coordinator

11 Outreach Coordinator

12 Marketing Coordinator

13 Learning Groups Coordinator

**14** 

#### **Technical Team Positions**

15 Technical Team Structure

16 Mechanics Co-Lead

17 Mechanics Head Engineer

18 Electronics Head Engineer

19 Electronics Engineer

20 Firmware Engineer (Microcontroller Dev)

21 Firmware Engineer (Embedded Systems)

23 Software Developer (General)

24 Software Developer (RL Agent Developer)

25 Mechanics Engineer



# APPLICATION PROCESS

# BUSINESS TEAM PROCESS





#### Written Application

Applicants must submit their written application by: SEPTEMBER 26TH, 11:59 PM

02

#### Interview Offer

Selected
applicants will
receive an
interview offer by:
ROLLING BASIS

03

#### Virtual Interview

Interviews will be conducted from:

SEPTEMBER 2 
OCTOBER 2

04

# Offers Sent Out\*

Successful applicants will receive a position offer by: OCTOBER 3 11:59 PM

<sup>\*</sup>Successful applicants will be required to have a minimum of 8 months committed to the role

<sup>\*</sup>All meetings and position-related events will take place at the SFU Burnaby Campus

# TECHNICAL TEAM PROCESS





Written Application

Applicants must submit their written application by: SEPTEMBER 19th, 11:59 PM

02

Interview Offer

Selected
applicants will
receive an
interview offer by:
ROLLING BASIS

03

Virtual Interview

Interviews will be conducted from: **SEPTEMBER 10 –** 

**SEPTEMBER 26** 

04

Offers Sent Out\*

Successful applicants will receive a position offer by:
SEPTEMBER 27TH,
11:59 PM

\*All meetings and position-related events will take place at the SFU Burnaby Campus



# BUSINESS TEAM POSITIONS

# VP OF INTERNAL RELATIONS



#### **RESPONSIBILITIES**

- Plan and facilitate internal events (team socials, onboarding, workshops, bonding activities)
- Support conflict resolution and ensure a positive, inclusive team culture.
- Collaborate with other executives to ensure alignment between internal and external initiatives.
- Act as the primary bridge between executives, subteams, and general members.

#### **REQUIREMENTS**

#### **MUST HAVE**

- Strong communication and interpersonal skills.
- Ability to handle sensitive issues with professionalism
- Excellent organizational and time-management abilities

#### **NICE TO HAVE**

- Background in event planning or student engagement
- Previous experience in leadership, mentorship, or team coordination.

#### COMMITMENT

• The VP of Internal Relations is expected to commit **7-9 hours each week,** attend weekly executive meetings with the team, and attend all organization-wide meetings

# **OUTREACH CO-LEAD**



#### **RESPONSIBILITIES**

- Oversee planning and execution of outreach workshops/events
- Ensure teaching content is consistent and engaging
- Manage scheduling, logistics, and partner relationships
- Communicate updates and needs to VP of Administration while leading Outreach Coordinators

#### **REQUIREMENTS**

#### **MUST HAVE**

- Leadership and team management skills
- Strong organizational and communication skills
- Experience in STEM/education/event coordination

#### **NICE TO HAVE**

- Strong robotics/engineering background
- Prior leadership in student clubs or outreach programs

#### COMMITMENT

• The Outreach Team Lead is expected to commit **7-9 hours each week,** coordinate with the VP of Administration, and attend all organization-wide meetings

# FINANCE COORDINATOR



#### RESPONSIBILITIES

- Track purchases, invoices, and receipts in bank and summary sheets
- Assist in drafting motions and managing subteam balances
- Support semesterly budget planning and additional financial tasks
- Reconcile accounts and monitor spending against budgets

#### **REQUIREMENTS**

#### **MUST HAVE**

- Attention to detail, financial literacy, and numerical abilities
- Proficient in Microsoft Suite (Excel, Word, PowerPoint, etc.)
- Excellent time management and organizational skills

#### **NICE TO HAVE**

- Passion for robotics or soccer
- Completion of BUS 251 and experience working with budgets

#### COMMITMENT

• The Finance Coordinator is expected to commit **4-6 hours per week,** coordinate with the VP of Finance, and participate in all organization-wide meetings and events.

# CORPORATE RELATIONS COORDINATOR (



#### **RESPONSIBILITIES**

- Identify and reach out to potential sponsors and partners
- Track sponsorship outreach and results in CRM
- Maintain relationships with existing sponsors and provide updates on club progress and activity.
- Collaborate with the VP of Corporate Relations to reach fundraising goals

#### **REQUIREMENTS**

#### **MUST HAVE**

- Strong written and verbal communication skills
- Proficient with spreadsheets and shared documents
- Professional communication with external stakeholders

#### **NICE TO HAVE**

- Experience with fundraising, sales or outreach.
- Familiarity with LinkedIn and existing network in business or tech communities

#### COMMITMENT

• The Corporate Relations Coordinator is expected to commit **4-6 hours per week,** coordinate with the VP of Corporate Relations, and participate in all organization-wide meetings and events.

# OUTREACH COORDINATOR



#### RESPONSIBILITIES

- Represent SFU Robot Soccer at outreach events
- Support event setup, demos, and team showcases
- Deliver engaging STEM/robotics workshops to children
- Coordinate with schools, clubs, and community partners

#### **REQUIREMENTS**

#### **MUST HAVE**

- Strong interpersonal and communication skills
- Ability to work with children in group settings
- Teamwork and reliability

#### **NICE TO HAVE**

- Leadership experience
- Prior teaching experience

#### COMMITMENT

• The Outreach Coordinator is expected to commit **4-6 hours per week,** coordinate with the Outreach Team Lead, and participate in all organization-wide meetings and events.

# MARKETING COORDINATOR



#### **RESPONSIBILITIES**

- Create posts, reels, videos and other promotional materials for club events and initiatives
- Manage the club's online presence and branding.
- Coordinate social media campaigns and content creation.
- Capture photos and videos at events for future promotional use

#### **REQUIREMENTS**

#### **MUST HAVE**

- Passion for social media, content creation and fun storytelling
- Experience with Canva, Figma, Photoshop or other design tools
- Ability to work independently and manage time effectively

#### **NICE TO HAVE**

- Understanding of social media trends and best practices
- Experience in managing social media accounts for other student clubs

#### COMMITMENT

• The Marketing Coordinator is expected to commit **4-6 hours per week,** coordinate with the VP of Public Relations, and participate in all organization-wide meetings and events.

# LEARNING GROUPS COORDINATOR



#### RESPONSIBILITIES

- Organize and facilitate SFU Robot Soccer learning groups according to the pre-made schedule.
- Coordinate project review schedules with technical team leads.
- Follow up with learning group members to ensure they are on track with progress.
- Direct feedback and questions about the curriculum to the appropriate team leads or instructors.

#### REQUIREMENTS

#### **MUST HAVE**

- Strong communication skills
- Excellent organizational skills
- Ability to effectively track and support member progress

#### **NICE TO HAVE**

- Educational background in engineering/computer science
- Previous experience or skills in engineering or computer science

#### COMMITMENT

• The Learning Groups Coordinator is expected to commit **4-6 hours per week,** coordinate with the VP of Internal Relations, and participate in all organization-wide meetings and events.



# TECHNICAL TEAM POSITIONS



# TEAM STRUCTURE

**President Team Lead Team Head Team Engineer** 

# MECHANICS CO-LEAD



#### **RESPONSIBILITIES**

- Lead the mechanics team in designing physical components of our robot, including the drive train, chassis, kicker, etc.
- Solve the most difficult technical challenges the team faces
- Assist in system-level planning and delegate tasks
- Research and evaluate materials essential for the projects, ensuring consistent improvement of mechanical quality

#### **REQUIREMENTS**

#### **MUST HAVE**

- Excellent grasp of CAD software
- Proven leadership skills with the ability to manage team workflows and delegate tasks efficiently.

#### **NICE TO HAVE**

Prior experience in mechanics development

#### COMMITMENT

• The Mechanics Co-Lead is expected to commit **8-10 hours per week**, attend weekly subteam meetings, and participate in all organization-wide meetings and events.

### MECHANICS HEAD ENGINEER—



#### **RESPONSIBILITIES**

- Head Engineer for designing and implementing physical aspects of the robots including drive train chassis, kicker and dribbler
- Provide guidance and assistance to team members to overcome technical challenges
- Work with other subteams to integrate electronics and ensure overall project alignment

#### **REQUIREMENTS**

#### **MUST HAVE**

- Should know Solidworks and/or other parametric CAD programs as well as experience with 3D printing
- Excellent leadership and communication skills; good planning and organizational skills

#### **NICE TO HAVE**

Ability to learn quickly

#### COMMITMENT

• A Mechanics Head Engineer is expected to commit **6-8 hours each week,** hold/attend weekly meetings with their subteam, and attend all organization-wide meetings

# ELECTRONICS HEAD ENGINEER-



#### **RESPONSIBILITIES**

- Design, bring up, and troubleshoot custom PCBs
- Work on integrating electronics with firmware and mechanics
- Help other members with their tasks

#### **REQUIREMENTS**

#### **MUST HAVE**

- Strong circuit and PCB design skills
- Good communication abilities
- Effective approach to troubleshooting

#### **NICE TO HAVE**

- Experience with Altium Designer
- Experience with PCB fabrication and assembly

#### COMMITMENT

• An Electronics Head Engineer is expected to commit **6-8 hours each week,** hold/attend weekly meetings with their subteam, and attend all organization-wide meetings

# ELECTRONICS ENGINEER



#### RESPONSIBILITIES

- Design and modify custom PCBs and other electronics using Altium designer
- Actively engage in troubleshooting hardware issues
- Work collaboratively with other members to integrate new components on the robots
- Solder, assemble, and rework PCBs

#### REQUIREMENTS

#### **MUST HAVE**

- Strong understanding of electrical components
- Circuit analysis skills and knowledge of component interactions
- Proficient in reading technical documentation and data sheets

#### **NICE TO HAVE**

 Experience in soldering and using Altium for PCB Design

#### COMMITMENT

• An Electronics Engineer is expected to commit **5-9 hours each week,** attend weekly meetings with their subteam, and attend all organization-wide meetings

# FIRMWARE ENGINEER



MICROCONTROLLER DEVELOPMENT (CURRENT REVISION OF ROBOTS)

#### **RESPONSIBILITIES**

- Developing firmware for a range of microcontrollers including SAM, PIC, and Arduino platforms.
- Perform testing of firmware code on the robots and robotic components
- Involves contributing to code reviews, debugging, and optimizing firmware
- Integration testing across all robotic subsystems with other teams

#### REQUIREMENTS

#### **MUST HAVE**

- Previous experience with programming microcontrollers
- Proficiency in C programming language and working with hardware protocols
- Basic understanding of digital and analog electronics

#### **NICE TO HAVE**

- Experience in interpreting datasheets and schematics
- Passionate about firmware development and willingness to learn new skills and concepts

#### COMMITMENT

• A Firmware Engineer is expected to commit **5-9 hours each week,** attend weekly meetings with their subteam, and attend all organization-wide meetings

# FIRMWARE ENGINEER



**EMBEDDED SYSTEMS (NEXT REVISION OF ROBOTS)** 

#### **RESPONSIBILITIES**

- Developing firmware for ARM-based microcontrollers and Raspberry Pi platforms.
- Implementing real-time task handling on MCUs and scheduling on Raspberry Pi.
- Writing and debugging low-level drivers for sensors, motors, and communication interfaces.
- Implementing and testing CAN bus communication across subsystems.

#### **REQUIREMENTS**

#### **MUST HAVE**

- Previous experience or projects programming microcontrollers
- Basic understanding of digital and analog electronics.
- Experience working with hardware protocols (UART, SPI, I<sup>2</sup>C, PWM, etc.)

#### **NICE TO HAVE**

- Experience with Raspberry Pi development
- Familiarity of CAN bus communication

#### COMMITMENT

• The Firmware Engineer is expected to commit **5-9 hours each week,** attend weekly subteam meetings, and attend all organization-wide meetings

# SOFTWARE DEVELOPER

# GENERAL SOFTWARE DEVELOPER RESPONSIBILITIES

- Implementing a large variety of project components using C++, JavaScript, QML, and XML, and a variety of other languages
- Creating tests for new and pre-existing components in the software using boost:ut, and creating verbose documentation
- Working on a variety sub-projects within a team environment, related to the software and DevOps

#### **REQUIREMENTS**

#### **MUST HAVE**

- Basic knowledge of version control using git...
- Discipline and motivation to stay committed to the process
- Ability to adapt quickly within a fast-paced environment

#### **NICE TO HAVE**

- Experience with GUI development (Python tk, Qt, Rust)
- Experience with C++ libraries such as boost::sc, boost:ut,
   Qt6, behaviourTree.cpp, or other networking interfaces.

#### COMMITMENT

• The General Software Developer is expected to commit **7-9 hours each week,** attend weekly subteam meetings, and attend all organization-wide meetings

# SOFTWARE DEVELOPER



# REINFORCEMENT LEARNING AGENT DEVELOPER RESPONSIBILITIES

- Implementing behaviors for the second, Python-based version of the agent
- Designing and optimizing frameworks for the RL agent, in collaboration with many other team members
- Designing, implementing, testing, and iterating upon new and existing code quickly

#### **REQUIREMENTS**

#### **MUST HAVE**

- Skilled with NN/RL frameworks or software architecture
- Proficient in ML/RL math and/or software architecture design
- Able to dedicate significant time to the project

#### **NICE TO HAVE**

- Experience integrating RL with Robotics
- Experience working in an agile development process

#### COMMITMENT

• The Reinforcement Learning Agent Developer is expected to commit **7-9 hours each week,** attend weekly subteam meetings, and attend all organization-wide meetings

# MECHANICS ENGINEER



#### **RESPONSIBILITIES**

- Help design and prototype mechanical and electromechanical systems on our fleet of robots
- Fabrication and assembly of parts including drive train, chassis, and kicker
- Research and evaluate materials essential for the projects, ensuring consistent improvement of mechanical quality

#### REQUIREMENTS

#### **MUST HAVE**

- Basic knowledge of Solidworks and/or other computer modelling programs
- Basic proficiency in manufacturing methods such as 3D printing, Laser cutting, and CNC

#### **NICE TO HAVE**

Skilled in 3D Printing

#### COMMITMENT

• A Mechanics Engineer is expected to commit **5-9 hours each week,** attend weekly meetings with their subteam, and attend all organization-wide meetings

# HAVE QUESTIONS?



#### **CONTACT US**



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