# CARLETON PLANETARY ROBOTICS TEAM (CPRT)

SPONSORSHIP PACKAGE 2018-2019







## Dear Potential Sponsor,

Thank you for taking the time to read through our sponsorship package and we hope that you consider sponsoring the Carleton Planetary Robotics Team. CPRT is a student-run, extracurricular group from Carleton University working to design, manufacture, and build a tele-operated Mars rover for competing in international competitions.

This year, CPRT is working towards competing in two different competitions: The University Rover Challenge, hosted at the Mars Desert Research Station in Utah, and the Canadian International Rover Challenge, held in Drumheller, Alberta. Each competition features several different tasks, including: soil sample collection and testing, autonomous traversing and obstacle avoidance, tool collection and delivery, and using the rover's robotic arm for precise object manipulation.

Our mission is to provide team members with hands-on engineering and design experience prior to graduation, while also working to engage the public about space exploration in an effort to inspire the next generation of STEM leaders. Our team holds multiple workshops throughout the year, teaching students how to CAD, solder, design PCB's, code and manufacture.

The success of CPRT relies heavily on donors such as yourself. All proceeds raised are used to help cover the costs associated with equipment, material expenses, travel, manufacturing, and testing. Any donations in the form of monetary contributions, materials, or professional service are greatly appreciated.

Thank you for your interest in CPRT; we look forward to forming a partnership with you. For more information, please feel free to email the team at carletonplanetaryrobotics@gmail.com or visit our website at carleton.ca/cprt.

Sincerely,

### Yannick Brisebois CPRT President 2018-2019







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## THE TEAM

The Carleton Planetary Robotics Team is comprised of over 50 students from our Faculty of Engineering and Design. This project brings together students from 1st to 4th year studying Aerospace, Communications, Computer Systems, Electrical, Mechanical, Software, Biomedical, and Civil Engineering. This extracurricular is open to anyone who is interested, and does not require any previous knowledge or expertise in the field to participate. The diversity of the team allows new students to



be mentored, learn from workshops run by more senior members, and gain invaluable design experience. Meeting a minimum of twice a week, CPRT members learn 3D modeling, machining skills, PCB design and assembly, cable management, and countless other skills that are essential to designing a rover in a year.

Last year was the team's fifth year as a club, and we came in 24th out of 95 teams who applied to compete at the University Rover Challenge (URC) in Utah.

## THE COMPETITIONS

Below are the four tasks from URC 2018: (tasks may vary slightly from year to year)

#### **Extreme Retrieval and Delivery:**

Travel through rough terrain to various sites, using the rover's robotic arm to pick up and deliver objects to specific locations.



#### Autonomous Navigation:

Travel from point A to point B autonomously. The rover is required to perform its own obstacle navigation, path planning, and notification of its



arrival when it reaches its destination.

#### **Science Cache:**

Take a panorama of the site, collect a soil sample, perform on-board and lab analysis, and present the results as a team with respect to



Mars geology and the search for life.

#### **Equipment Servicing:**

Manipulate a series of switches, dials, and levers, read screen status outputs, type a code on a keyboard, and



open a heavy drawer.



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# SPONSOR BENEFITS

Thank you for considering sponsoring our team! Below are our sponsorship levels—please note that the values shown include both monetary and in-kind sponsorship:

	DIAMOND	PLATINUM	GOLD	SILVER	BRONZE
	Jan Jan			A South	
	\$5000+	\$2500+	\$1000+	\$500+	\$10O+
Invitation to launch events	✓	✓	✓	✓	✓
Logo on website	✓	✓	✓	✓	✓
Recognition on social media	✓	✓	✓	✓	✓
Progress updates	✓	✓	✓	✓	✓
Logo/name on rover	✓	✓	✓	✓	
Logo/name on team apparel	✓	✓	✓		
Logo/name on banner	✓	✓			
Signage/promotional material at events	✓				
Custom opportunities available on request	✓				





