

## LAST MILE ROUTING RESEARCH CHALLENGE OFFICIAL RULES

The Routing Research Challenge (the “Competition”) is a skill competition sponsored by Amazon.com, Inc. (“Amazon”). Amazon, where competing teams of college or university students or researchers develop methods to build code written to implement Route Sequence Code algorithms that optimize a given set of metrics by learning from existing route sequences data (the “Route Sequence Code”). See below for the complete Competition details.

**By applying to or participating in the Competition, you agree to these Official Rules. Please read them carefully.**

**COMPETITION CALENDAR:** The Competition starts on February 22, 2021 and ends in July 2021 the “Competition Period”). The Competition phases are noted in the calendar below. The dates are approximate and are subject to change at Amazon’s discretion.

Phases	Starts On	Ends On
Participant Application Period	February 22	March 29
Research Period	March 15	June 18
Milestone 1: Test round		May 15
Milestone 2: Code submission		June 18
Evaluation Period	June 18	July 9
Technical Article Submission		July 2
Winners announced		July 30

**ELIGIBILITY:** To be eligible to enter the Competition, you must: (1) be enrolled as a full-time undergraduate or post-graduate student at, or be employed as a researcher at, an accredited college or university (other than colleges or universities located in any of the restricted jurisdictions outlined below) (“Universities”) and remain a full-time student in good standing at such University while participating in the Competition; (2) not be paid as an employee of an entity other than an accredited academic institution; (3) be at or above the age of majority in your country, state, province or jurisdiction of residence at the time of entry; and (4) not be a person or entity under U.S. export controls or sanctions. Competition is void in Cuba, Iran, Syria, North Korea, Sudan, the region of Crimea, and where prohibited by law. At a Amazon’s request, you must be able to provide proof of enrollment in, or affiliation with, an accredited academic institution during the 2021 spring semester. People who, during the Competition Period, are, or in the 12 months preceding the beginning of the Competition Period were, directors, officers, employees, interns, and contractors (“Personnel”) of Amazon and its affiliates, their parents,

subsidiaries, affiliates, and their respective advertising, promotion and public relations agencies, representatives, agents, and collaborators, including Massachusetts Institute of Technology (“MIT”) personnel involved in helping to facilitate this Research Challenge (collectively, “Competition Entities”), immediate families members of such Personnel (parents, siblings, children, spouses, and life partners of each) and members of the households of such Personnel (whether related or not), are ineligible to participate in this Competition. Students and researchers affiliated with MIT but not engaged in facilitating this Research Challenge and evaluating Entrants’ Route Sequence Codes may participate in the Competition so long as they provide a written acknowledgement to Amazon and MIT that they have not and will not, directly or indirectly, receive assistance from any other members of the MIT community involved in organizing, running, and designing this Research Challenge and evaluating Entrants’ Route Sequence Codes. Amazon reserves the right to verify eligibility and to adjudicate on any dispute at any time.

Entrants (“Entrants”) must enter as part of an “Entrant Team” consisting of one to three students and/or researchers (whether at a single academic institution or multiple academic institutions). An Entrant is only permitted to be part of one Entrant Team. Any Entrant that is part of more than one Entrant Team may be disqualified and his/her corresponding Entrant Teams may be disqualified as well at the sole discretion of Amazon. Only one member of the Entrant Team may submit an application on behalf of an Entrant Team but all those listed on the application will be deemed Entrants. All prize money payable to Entrant Teams will be split evenly among the members of a winning Entrant Team (based on the pre-tax amount of prize money), as identified in the application, as updated as permitted by these Official Rules. During the Competition, but no later than April 30, 2021, an Entrant Team may request to remove members from the Entrant Team or to add additional members to the Entrant Team, subject to the cap of three members per Entrant Team, along with an explanation of the reason for the removal or addition. Such changes to the Entrant Team may be made subject to Amazon’ approval in their sole discretion and the new member(s) providing documentation requested by the Amazon and agreeing to comply with these Official Rules. Each Entrant must be eligible to participate in this Competition and comply with these Official Rules or the Entrant will and the Entrant Team associated with the Entrant in question may be disqualified. This Competition is subject to all applicable federal, state, territorial, provincial and local laws. Competition is void where prohibited. By participating in the Competition, all Entrants unconditionally accept and agree to comply with and abide by these Official Rules and the decisions of the Amazon which will be final and binding including the Amazon’ right to verify eligibility, to interpret these Official Rules, and to resolve any disputes relating to this Competition at any time. Only Entrants may work on the Route Sequence Code, although, with the exception of members of the MIT community involved in facilitating this Research Challenge and evaluating Entrants’ Route Sequence Codes, other students and faculty members at accredited academic institutions may provide support and advice to the Entrant Teams and may co-author the Technical Article (as defined below) or other research papers.

#### **DESCRIPTION OF COMPETITION:**

**“Participant Application Period”:** Between February 22, 2021 and March 29, 2021, each individual who wishes to enter the Competition may visit the website <https://routingchallenge.mit.edu/> (“Competition Site”) where the applicant may submit the

required entry information via the application portal, including, but not limited to: complete name, contact information, and proof of University enrolled or affiliated status (e.g., verification of enrollment or an uploaded copy of the applicant's student or faculty ID).

Entry Applications may be submitted at any time during the Participant Application Period. All Entry Applications must be complete when the Participant Application Period closes at 11:59 pm Pacific Time on March 29, 2021. Entry Applications are not complete until all the online prompts and instructions to upload the Entry Application have been properly followed, and the Official Rules have been affirmatively accepted. Entry Applications may not be revised once submitted. Entry Applications will not be returned and become the property of Amazon.

Once Entry Applications have been verified and approved by Amazon, admitted Entrants will receive a link and login credentials for the participant portal. Once logged into the participant portal, each Entrant has the option to create a team, invite other Entrants to join the team, or apply to join the team that another Entrant created. The Entrant who created a team is considered the team lead and is in control of the team's composition. Each Entrant can *only* be part of **one team**, and each team can consist of three Entrants, maximum. For administrative purposes, Entrants who wish to compete individually on their own still need to create a team with themselves being the sole team member. Entrants need to be part of a team in order to be able to submit their work. Teams can be created, modified or dissolved beyond the end of the Participant Application Period.

**Entry Terms:** Determination of compliance with entry and other requirements and these Official Rules will be in the sole discretion of the Amazon. By entering, all Entrants represent that to their actual knowledge as of the time such Entrant submits its Route Sequence Code and Technical Article, if applicable:

1. entries are the original work of the Entrant Team except to the extent that Entrants properly incorporate into their Route Sequence Code open source software compatible with the required licenses for releasing code in this Competition (i.e., under the MIT or Apache 2.0 license), or any Program Materials as described below;
2. entries do not infringe or violate the rights of any third party, including but not limited to, copyrights, trademarks or copyrighted material or any other intellectual property rights; and
3. entries are not subject to any third party agreements (other than entries which may be subject to open source data and/or software licenses and licenses related to Program Materials), and that Amazon will not be required to pay or incur any sums to any person or entity as a result of its exercise of any rights granted under these Official Rules.

### **Additional Requirements**

Entrant Teams must submit their Route Sequence Code via the Competition Site. Each Entrant Team will need to provide the Route Sequence Code via executable code through the Competition Site in a manner that ensures that results can be reproduced by Amazon. Entrants will also publicly release their Route Sequence Codes under the terms of Apache 2.0 or MIT open source licenses.

Upon request from Amazon, Entrant Teams are expected to: (a) provide a Technical Article that describes the Route Sequence Code approach, mathematical formulation and corresponding results. Entrant Teams further agree to deliver to Amazon, at Amazon's request, a 15-minute presentation on their proposed Route Sequence Code via video conference.

During all phases of the Competition, Amazon may in its sole discretion require all Entrant Teams to provide periodic status updates, reports or demonstrations of the Route Sequence Code. Amazon may also require all Entrant Teams to comply with additional rules, requirements, or procedures that Amazon determines, in Amazon's sole discretion, are necessary for the administration of the Competition. Amazon may in its sole discretion penalize teams for noncompliance with any rules, requirements, or procedures, up to and including disqualification from the Competition.

Amazon may provide Entrants selected to participate in the Competition access to software, software development kits, libraries, APIs, documentation, sample code, templates, data sets, and related materials ("Program Materials") that may be used in connection with the Competition. If an Entrant uses any Program Materials, he or she is subject to and agrees to comply with licenses provided by Amazon and that are associated with such Program Materials (including, without limitation, applicable open source licenses). Amazon reserves the right in its sole discretion to impose additional terms and conditions on the use of Program Materials, and to condition access to Program Materials on Entrants' agreement to those terms and conditions.

**Disclosure of Third-Party Funding.** If at any time during the Competition any Entrant Team receives any third-party funding to facilitate its participation in this Competition, such funding must be disclosed to Amazon within 30 days of receipt of such funding, but in no event later than June 18, 2021, along with any requirements imposed on the Entrant Team in connection with the funding. Entrant Teams may not accept or use any third-party funding if acceptance or use of that funding, or any requirements imposed in connection with that funding, would conflict with these Official Rules.

**"Research Period":**

On March 15, 2021, Amazon will publicly release the full datasets to be used for the Competition by Entrant Teams. Amazon will further provide instructions that explain the problem to be addressed, and the interpretation of the data provided.

Amazon and MIT will be available to respond to procedural and technical questions. Monthly webinars at the beginning of April, May and June will enable all participants to articulate questions. Entrant Teams will be given the opportunity to submit and evaluate the performance of a preliminary code implementation of their work in mid-May. Entrant Teams have to submit the final code implementation of their work by June 18, 2021.

**"Evaluation Period":** From June 18, 2021 to July 9, 2021 all eligible Entry Applications will be reviewed by MIT and MIT will calculate performance metrics. Based on these metrics, MIT will objectively and quantitatively review each of the blinded Entry Applications taking into consideration the accuracy, total route time, and total computational time, and using evaluation metrics approved by Amazon and communicated to Entrants prior to submission of the Entry Application, to derive an internal ranking of all blinded submissions. MIT will suggest a ranking of submissions to Amazon. Amazon will audit the internal ranking and will determine the final

ranking of submissions and announce the winners.

**“Finalist Technical Article Submission and Presentation Period”:** Leaders of Entrant Teams that have been selected by Amazon as finalists in the Competition will be notified by email on or around July 9, 2021 at the email address provided at time of Entry Application. All Entrants may be required by Amazon to complete and return an Affidavit of Eligibility and Publicity/Liability Release (where legal) and an Entrant Release Form and Affirmation that, among other things, affirms each Entrant’s agreement to these Official Rules, and may be subject to a Background Check Authorization Form and/or any other vetting process within the timeframe stated on the notification attempt or a runner-up potential finalist Entrant Team may be contacted, time permitting. If any email notification is returned as undeliverable, if a potential finalist Entrant Team does not respond within the required number of days specified by a Amazon, or if information collected within the clearance documentation, entry, or background check is found in non-compliance with these Official Rules or raises other issues of significant concern to Amazon, or if a potential finalist Entrant Team or Entrant declines to proceed for any reason whatsoever, the Amazon shall have no further obligation to such potential finalist Entrant Team and a runner-up finalist Entrant Team selected by Amazon in their sole discretion may be contacted, time permitting.

**Technical Article.** By no later than July 2, 2021, all finalist Entrant Teams must submit a technical article including (a) the technical approach for their Route Sequence Code, and (b) any comparative experiments performed by the Entrant Team and results of those experiments (a “Technical Article”). Each finalist Entrant Team’s Technical Article must include sufficient detail to permit other researchers to replicate the work. However, Technical Articles may not include any confidential information of any entity or person. If a Technical Article does not provide sufficient detail to replicate the work, Amazon may require the Entrant Team to provide Amazon any additional information needed to replicate the work and may disqualify the Entrant Team at its discretion if sufficient additional information is not received in a timely manner. Entrants acknowledge that Entrant Teams, as well as Competition Entities may each, in their sole discretion, publish the Technical Articles or portions thereof at any time.

**2021 First-Place Prize (1):** The winning Entrant Team will receive \$100,000 U.S. dollars awarded in the form of checks divided equally among all Entrant Team members.

**2021 Second-Place Prize (1):** The Entrant Team that receives the second highest Composite Score will receive \$50,000 U.S. dollars awarded in the form of checks divided equally among all Entrant Team members.

**2021 Third-Place Prize (1):** The Entrant Team that receives the third highest Composite Score will receive \$25,000 U.S. dollars awarded in the form of checks divided equally among all Entrant Team members.

**Prize Conditions.** Prizes are non-transferable except as directed by the Amazon. No prize substitutions allowed. Except where prohibited by law, all federal, state, provincial or other tax liabilities are the responsibility of the prize winners, the Amazon will not be responsible for any tax deductions which may be necessary and Amazon reserves the right to withhold taxes as required by law. Prize winners will be responsible for paying all costs and expenses related to the

prize that are not specifically mentioned, including, but not limited to, taxes, withholdings, and any other expenses that might reasonably be incurred by the winner in receiving or using the prize. All prizes awarded will be subject to any taxes Amazon is required by law to withhold as well as applicable sales, use, gross receipts, goods and service, or similar transaction based taxes. IF TAXES ARE APPLICABLE TO THE PRIZE(S), IT IS THE RESPONSIBILITY OF THE WINNER TO PAY TO THE APPROPRIATE AUTHORITIES. PAYMENTS TO COMPETITION WINNERS ARE SUBJECT TO THE EXPRESS REQUIREMENT THAT THE WINNER SUBMIT TO AMAZON ALL DOCUMENTATION REQUESTED BY AMAZON (INCLUDING FORMS W-9 OR W-8BEN AS REQUESTED BY AMAZON) TO PERMIT COMPLIANCE WITH ALL APPLICABLE STATE, FEDERAL, LOCAL AND FOREIGN (INCLUDING PROVINCIAL) TAX REPORTING AND WITHHOLDING REQUIREMENTS. Prize winners are responsible for ensuring that the tax documentation submitted to Amazon complies with all applicable tax laws and requirements. If a winner fails to provide the documentation or submits incomplete documentation, the prize may be forfeited and Amazon may, in its sole discretion, select alternate winner(s).

Amazon will divide the award that is payable to Entrant Team evenly among all Entrant Team members and distribute accordingly. Designation as a prize winner is subject to Entrant's proof of compliance with these Official Rules, maintaining compliance with these Official Rules and approval by the Amazon. All details of prizes not specified herein shall be determined solely by Amazon.

**PRIVACY:** Entrants acknowledge and agree that Amazon and/or MIT may collect, store, share and otherwise use personally identifiable information provided during the application process and the Competition, including, but not limited to, name, mailing address, phone number, and email address. All personally identifiable information collected is subject to and will be used in accordance with MIT's Privacy Policy (<https://routingchallenge.mit.edu/privacy-policy/>), including for administering the Competition and verifying Entrants' identities, addresses and telephone numbers in the event an entry qualifies for a prize. The servers used in connection with the Competition are located in the United States. By participating in this Competition, Entrants are authorizing the transfer of personal data to the United States for purposes of administering the Competition, conducting publicity about the Competition and such additional purposes consistent with Amazon and MIT's goals or the Competition goals. By entering the Competition, Entrants consent to Amazon and MIT's collection, use and disclosure of Entrants' personally identifiable information for these purposes. The data controller for information collected by Amazon and/or MIT is MIT (77 Massachusetts Avenue, Cambridge, MA 02139, USA). By entering the Competition, each Entrant/Entrant Team represents and warrants that he or she has obtained all of the rights, licenses, and permissions in writing from any person who may have helped create the Route Sequence Code or that are otherwise necessary for the Entrant Team to distribute the Route Sequence Code under the terms of the Apache 2.0 or MIT open source licenses. Entrants MAY NOT submit a Route Sequence Code created by any person other than themselves or their Entrant Team members. Decisions by Amazon and/or MIT are final and binding.

**INTELLECTUAL PROPERTY:** As between Amazon and Entrant Teams, all Route Sequence Codes created by Entrant Teams, only to the extent such Codes contain original work, will remain the property of the respective Entrant Teams (excluding any Program Materials incorporated in the Route Sequence Code). However, Competition Entities and their designees will have rights to evaluate the Route Sequence Codes for the purpose of determining a winner of this Competition. Each Entrant grants to Competition Entities the right to publish the Route Sequence Code, Technical Articles or portions thereof at the sole discretion of the Competition Entities at any time.

As described above, Entrants are additionally required to publicly release their Route Sequence Codes under the terms of Apache 2.0 or MIT open source licenses.

**WAIVER, RELEASE, AND LIMITATION OF LIABILITY:**

**EACH ENTRANT ACCEPTS THE CONDITIONS STATED IN THESE OFFICIAL RULES, AGREES TO BE BOUND BY THE DECISIONS OF AMAZON AND MIT, WARRANTS THAT HE OR SHE IS ELIGIBLE TO PARTICIPATE IN THIS COMPETITION AND AGREES TO RELEASE THE COMPETITION ENTITIES AND THE PERSONNEL OF EACH FROM ANY AND ALL CLAIMS, LOSSES, LIABILITY, AND DAMAGES OF ANY KIND (INCLUDING REASONABLE ATTORNEYS' FEES AND EXPENSES) ASSERTED AGAINST ANY OF THEM, INCURRED OR SUSTAINED IN CONNECTION WITH OR ARISING OUT OF ENTRANT'S PARTICIPATION IN THIS COMPETITION, USE OF ANY ROUTE SEQUENCE CODE OR RIGHTS THEREIN, OR BREACH OF ANY AGREEMENT OR WARRANTY ASSOCIATED WITH THE COMPETITION, INCLUDING THESE OFFICIAL RULES. ANY ATTEMPT TO DELIBERATELY DAMAGE ANY WEBSITE OR UNDERMINE THE LEGITIMATE OPERATION OF THE COMPETITION IS A VIOLATION OF CRIMINAL AND CIVIL LAWS AND, SHOULD SUCH AN ATTEMPT BE MADE, THE COMPETITION ENTITIES RESERVE THE RIGHT TO SEEK ANY AND ALL REMEDIES AVAILABLE FROM ANY SUCH PERSON(S) RESPONSIBLE FOR ANY SUCH ATTEMPT TO THE FULLEST EXTENT PERMITTED BY LAW.**

Each Entrant hereby acknowledges and agrees that the relationship between themselves and any Competition Entities is not a confidential, fiduciary, or other special relationship, and that the Entrant's decision to provide the entry to Amazon for purposes of the Competition does not place the Competition Entities in a position that is any different from the position held by members of the general public with regard to elements of the entry, other than as set forth in these Official Rules. Each Entrant understands and acknowledges that the Competition Entities have wide access to Route Sequence Codes, technology, designs, and other materials, and that new ideas are constantly being submitted to them or being developed by their own employees. Each Entrant also acknowledges that many ideas may be competitive with, similar to, or identical to the Route Sequence Code submission in theme, idea, format, or other respects. Each Entrant acknowledges and agrees that such Entrant will not be entitled to any compensation as a result of Competition Entities' use of any such similar or identical material that has or may come to Competition Entities, or any of them, from other sources. Entrants acknowledge that other Entrants/Entrant Teams may have created ideas and concepts contained in their Route Sequence Code design that may have familiarities or similarities to their Route Sequence Code design, and that they will not be entitled to any compensation or right to negotiate with the Competition Entities because of these familiarities or similarities.

Entrants further agree that the Competition Entities are not responsible for the following: (a) electronic transmissions, Route Sequence Code or entries or notifications that are lost, late, stolen, incomplete, damaged, garbled, destroyed, misdirected or not received by Amazon or their agents for any reason; (b) any problems or technical malfunctions, errors, omissions, interruptions, deletions, defects, delays in operation or transmission, communication failures and/or human error that may occur in the transmission, shipping errors or delays, receipt or processing of entries or related materials; or for destruction of or unauthorized access to, or alteration of, entries or related material; (c) failed or unavailable hardware, network, software or telephone transmissions, damage to Entrants' or any person's computer and/or its contents related to or resulting from participation in this Competition; (d) causes that jeopardize the

administration, security, fairness, integrity, or proper conduct of this Competition; (e) any entries submitted in a manner that is not expressly allowed under these Official Rules (all such entries will be disqualified); or (f) any printing errors in these Official Rules or in any advertisements or correspondence in connection with this Competition or scores. Amazon reserves the right, in its sole discretion, to cancel or suspend this Competition should virus, bugs, fraud, hacking, or other causes corrupt the administration, security, or proper play of the Competition, or in the event Amazon does not receive a minimum of three qualified entries from separate eligible Entrant Teams. Amazon further reserves the right, in its sole discretion, to cancel or suspend this Competition or to reschedule or reformat events, should Amazon be prevented, in any manner whatsoever, from holding this Competition or any event due to any present or future law (whether or not valid); any act of God, earthquake, fire, flood, epidemic (including, without limitation, any pandemic), accident, explosion or casualty; any civil disturbance or armed conflict; or any other cause of any similar nature outside of Amazon' control. In all such cases, notice to this effect will be posted on the Competition Site and prizes to the extent awarded will be awarded as determined by Amazon prior to cancellation. If, in Amazon' opinion, there is any suspected or actual evidence of electronic or non-electronic tampering with any portion of the Competition or if technical difficulties compromise the integrity of the Competition, the Amazon reserves the right to void suspect entries and/or terminate the Competition and award prizes in its sole discretion. Amazon reserves the right, in its sole discretion, to disqualify any individual found tampering with the entry process or entry materials or otherwise interfering with the proper administration of the Competition or violating these Official Rules.

DISPUTES: EXCEPT WHERE PROHIBITED, YOU AGREE THAT: (1) ANY AND ALL DISPUTES, CLAIMS AND CAUSES OF ACTION ARISING OUT OF OR CONNECTED WITH THIS COMPETITION OR ANY PRIZE AWARDED SHALL BE RESOLVED INDIVIDUALLY, WITHOUT RESORT TO ANY FORM OF CLASS ACTION; (2) ANY AND ALL CLAIMS, JUDGMENTS AND AWARDS SHALL BE LIMITED TO ACTUAL OUT-OF-POCKET COSTS INCURRED, INCLUDING COSTS ASSOCIATED WITH ENTERING THIS COMPETITION, BUT IN NO EVENT ATTORNEYS' FEES; AND (3) UNDER NO CIRCUMSTANCES WILL YOU BE PERMITTED TO OBTAIN AWARDS FOR, AND YOU HEREBY WAIVE ALL RIGHTS TO CLAIM, INDIRECT, PUNITIVE, INCIDENTAL AND CONSEQUENTIAL DAMAGES AND ANY OTHER DAMAGES (OTHER THAN FOR ACTUAL OUT-OF-POCKET EXPENSES), AND ANY AND ALL RIGHTS TO HAVE DAMAGES MULTIPLIED OR OTHERWISE INCREASED.

All issues and questions concerning the construction, validity, interpretation and enforceability of these Official Rules, or the rights and obligations of the Entrant and Amazon in connection with the Competition, shall be governed by, and construed in accordance with, the laws of the State of Washington without giving effect to any choice of law or conflict of law rules (whether of the State of Washington or any other jurisdiction), which would cause the application of the laws of any jurisdiction other than the State of Washington.

**AMAZON:** Amazon.com, Inc., 410 Terry Ave North, Seattle, Washington 98109, USA