

# Bayer **Grants4Tech** 2017/2018

## Digital4Eyes Challenge

### Rules and Prizes

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# 1 Preamble

Bayer is an innovation company with a more than 150-year history and core competencies in the fields of health care and agriculture. We develop new molecules for use in innovative products and solutions to improve the health of humans, animals and plants. Our research and development activities are based on a profound understanding of the biochemical processes in living organisms. Manufacturing of our products requires cutting edge technology and the highest standards of quality. However, for certain tasks automation of unstructured activities creates a challenge.

The 2018 Grants4Tech competition aims to strengthen the bond between the Life science industry, academic research communities and start-ups. It shall give insights into the types of digital solutions for the visual double check, often called “4-eyes-checks”.

## 2 The Digital4Eyes Challenge

The 4-eyes check is required in many industrial processes to verify successful outcomes. In some industries like the pharmaceutical industry these 4-eyes-checks can be required by regulations.

**In this challenge we ask for a prototype of a mobile and versatile digital solution that acts like a second pair of eyes in many different situations. Any qualified employee must be able to adopt and train the solution and apply it to a new task.**

The breakthrough we are looking for is the transfer of existing technologies into a mobile and versatile solution. Participants have to present a prototype consisting of all necessary hardware (view sponsoring section incl. link) and software to learn and perform double checks. We expect enormous potential from these solutions as double checks are very common in industry.

### The task

Digital4Eyes solutions have to master two tasks.

1. First task is the Digital4Eyes check. It starts with capturing the situation using a mobile camera which is processed by an algorithm to preforms the actual check. The result of the check either confirms or rejects the finding of the operator (Human2Eyes). The final step is the documentation of the Ditigal4Eyes check.
2. The second task is learning. Qualified personnel must be able to train the Digital4Eyes solution on new scenarios without the support of experts.

Bayer will provide three scenarios to develop, train, and test Digital4Eyes solutions.

- (a) **Check the actual status of a setting / machine**  
Recognize the state of a system and confirm if it is in the desired state or not.
- (b) **Inspect equipment after cleaning**  
Recognize if a polished surface is clean. Differentiate shadows or reflections from product residue.
- (c) **Inspect machines after clearance.**  
Identify blisters, cartons, leaflets or parts of them in a production line.

During the final event these scenarios will be used to evaluate the solutions. The flexibility of the solutions will be tested using variations of the three scenarios.

### 3 Phases of Competition

Phase	Start (CET 12:00 AM)	End (CET 11.59 PM)
1: Proposal entry period	October 2017	January 15, 2018
2: Proposal review period	January 15, 2018	January 31, 2018
3: Development phase	February 1, 2018	May, 2018
4: Finalist event and prize winners announcement	May, 2018	May, 2018

#### 3.1 Rules “Proposals Entry Period”

Entrant or Entrant Teams who wish to enter the Competition may visit <https://grants4tech.bayer.com> (“Competition Site”) and submit the entry information required including, but not limited to: Entrant name, email address, team size, mailing address, daytime phone number, and include an overview of their solution to the challenge defined in Grants4Tech 2018 Competition. Proposal Entries may be submitted at any time from October, 2017 to January 15<sup>th</sup>, 2018 (“Proposal Entry Period”). Proposal Entry is not complete until all the online prompts and instructions to upload Proposal Entry have been properly followed and the Rules have been affirmatively accepted. Proposal Entries will not be returned and become the property of the Sponsor. Entrants/Entrant Team will retain the rights to any intellectual property pertaining to their idea. If selected to participate in the Finalist Event (as defined below) the Solution itself remains the property of the Entrant. By submitting a Proposal Entry, the Entrant/Entrant Team warrants and represents that Entrant/Entrant Team is the creator of the Proposal Entry and that Entrant/Entrant Team consents to the submission and use of the Proposal Entry in the Competition. Further Entrant/Entrant Team warrants that it has the right to present the Solution and to participate in the Competition. In addition, Entrant/Entrant Team warrants that there are provided no claims, judgments or settlements against or owed by the Entrant/Entrant Team or pending or threatened claims or litigation, relating to (the use of) the Solution.

Each Proposal Entry and subsequent Solution must comply with the entry terms, as defined below (“Entry Terms”) and technical requirements set out in Grant4Tech 2018 Competition.

It is allowed for Entrants/Entrant Teams to cooperate with partners. Expected partners have to be named in the proposal (“Expected Partners”). Expected Partners are the companies which may make available their hardware upon agreement between Entrant and Partner.

ENTRY TERMS: Determination of compliance with entry, technical, and creative requirements and these Rules will be in the sole discretion of the Sponsor and the designated Review Panel (as defined below). By entering, each Entrant/Entrant Team warrants that Entry Proposals:

- i. Are the original work of the Entrant/Entrant Team or an update to an original work of the Entrant/Entrant Team;

- ii. Do not contain any use of names, likenesses, photographs, or other identifying elements in whole or in part, of any person, living or dead, without permission (proof of which must be provided to the Sponsor upon request in a form satisfactory to Sponsor);
- iii. Do not infringe or violate the rights of any third party, including but not limited to, copyrights, trademarks, logos, copyrighted material not owned by Entrant/Entrant Team (other than Sponsor's related materials that were provided to Entrant/Entrant Team by or on behalf of Sponsor in connection with the Competition), contract and licensing rights, rights of publicity or privacy, moral rights, or any other property rights;
- iv. Are not subject to any third party agreements other than named in the Entry Proposal, and that Sponsor will not be required to pay or incur any sums to any person or entity as a result of its ownership, acquisition, use or exploitation of the Entry Proposals or rights therein;
- v. Were made with the understanding that any required permits from local authorities or other permissions have been obtained and is documented sufficiently such that Entrant/Entrant Team can show proof of such permission upon request from the Sponsor; and
- vi. Do not promote any activity that may appear unsafe or dangerous.

### 3.2 Rules "Proposals Review Period"

All eligible Proposal Entries will be judged and scored by a review panel chosen by the Sponsor ("Review Panel"). The Review Panel will rank Proposal Entries based on the maturity and flexibility of the proposed design and the likelihood the design will result in successful performance in the "Competition finalist event" ("Finalist Event"). Exceptional, specialized solutions might also be taken into consideration. Sponsor reserves the right to assess Proposal Entries in the manner determined by the Sponsor, which may include interviews or discussions with certain Entrants/Entrant Teams. The six Proposal Entries ranked highest by the Review Panel will be deemed finalists ("Finalist") (subject to verification and compliance with these Rules) and will be invited to attend the Finalist Event. The Finalist Event is scheduled to take place in Berlin May 2018. Sponsor's decisions are final and binding in all matters relating to this Competition.

### 3.3 Rules "Finalist Notification Period"

Finalists will be notified by email at the email address provided by January 31<sup>th</sup>, 2018. Finalists will be invited at Sponsor costs (travel costs for 2 persons in economy class and one night in three stars hotel) to a Sponsor Site, where they can gather information and examples regarding the three challenges. If any email notification is returned as undeliverable, if a Finalist does not respond within the required number of days specified by Sponsor, or if information collected within the clearance documentation, entry, or background check is found in non-compliance with the Rules, raises other issues of significant concern to Sponsor or a potential winner decides to decline the prize for any reason whatsoever, Sponsor shall have no further obligation to such Finalist and the applicable prize will be forfeited and may be awarded to a runner-up Finalist time-permitting and at the Sponsor's sole discretion.

## 4 Eligibility

Individuals may enter as a sole entrant ("Entrant") or as part of an entrant team ("Entrant Team"). An individual is permitted to be part of more than one Entrant Team and may enter as part of an Entrant Team and as a sole Entrant if they desire. Only one (1) person on an Entrant Team will be considered

the Entrant for entry purposes (“Team Representative”). Each member of any Entrant Team must be eligible to participate in this competition as described and comply with the Rules as set out in this document or such Entrant Team may be disqualified. This Competition is subject to all applicable federal, state and local laws. By participating in the Competition, each Entrant and each member of each participating Entrant Team (as applicable), unconditionally accepts and agrees to comply with and abide by these Rules and the decisions of Bayer AG as sponsor of the Competition (“Sponsor”), which will be final and binding including the Sponsor’s right to verify eligibility, to interpret these Rules, and to resolve any disputes relating to this Competition at any time.

To be eligible to enter the Competition you must be above the age of majority in the country, state, province or jurisdiction of residence (and at least twenty years old in Taiwan) at the time of entry. Challenge is void in all countries, where prohibited by law. Employees, interns, contractors, and official office-holders of Sponsor its subsidiaries, affiliates, and their respective directors, officers, employees, advertising and promotion agencies, representatives, and agents (“Competition Entities”), and members of the Competition Entities and their immediate families (parents, siblings, children, spouses, and life partners of each, (regardless of where they live) and members of the households (whether related or not) of such employees, officers and directors are ineligible to participate in this Competition. Sponsor reserves the right to verify eligibility and to adjudicate on any dispute at any time.

If you are entering as part of a company or on behalf of your employer, these Rules are binding on you, individually, and/or your employer. If you are acting within the scope of your employment, as an employee, contractor, or agent of another party, you warrant that such party has full knowledge of your actions and has consented thereto, including to the terms of these Rules and your potential receipt of a prize. You further warrant that your actions do not violate your employers or company’s policies and procedures.

## 5 Finalist event and task attempt rules

The Finalist Event will take place in Berlin over four days. Travel and transport costs for each team will be covered by the Sponsor (economy class flights, three stars hotel, and transport of the hardware, if necessary, to the event location) for a maximum of 3 team members. Each team will have a dedicated place for the duration of the Event. At the beginning all finalists will receive an unknown variation of one challenge in order to test the versatility of their solution. The actual final where the finalists apply their solutions to the three scenarios and the unknown variations takes place during the last two days.

An attempt is defined as a single scored run in which the participants need to perform a number of digital4eyes checks for a scenario. The attempt starts with the Entrant/Entrant Team to announce the start of a scored attempt. The attempt is finished after either the Entrant/ Entrant Team declares the end or the time limit of 15 minutes is over. During the attempts mobile illumination and manual handling of the camera or sensors are allowed.

Scoring criteria for each challenge:

- Reliability :

- no false negatives where the 4eyes control fails to reject the finding
- few false positives where the 4eyes control wrongly rejects a finding.
- **Versatility:** can the proposed solution handle more than one of the specific challenges
- **Speed:** if the reliability is similar the faster the solution performs the tasks the better.

The scoring scheme is such that the team with the highest score wins the competition.

1. **Reliability:**

A team earns 5 points for every correct Digital4Eyes check. A false negative earns a team 0 points and a false positive 2 points.

2. **Versatility:**

if a team does not participate in one of the challenges it earns no points

3. **Time:**

When two teams have the same points the time needed to solve the challenge determines the ranking.

Scoring Penalties: For certain actions such as manipulations of the provided scenario, ... penalties will be assigned and subtracted from the score.

## 6 Prizes

The top three Finalists will receive monetary prizes as listed below:

1st place: 40.000€

2nd place: 20.000€

3rd place: 15.000€

4<sup>th</sup>-6<sup>th</sup> place: 10.000€

If there are Finalists equal in score and time they will receive split prizes for their combined position.

Prizes are nontransferable. No prize substitutions or cash redemptions allowed. Except where prohibited by law, all federal, state, or other tax liabilities are the responsibility of the prize winners and the Sponsor will not be responsible for any tax deductions which may be necessary. In the event an Entrant Team is deemed a prize winner, the Entrant Team Representative of such Entrant Team will be solely responsible for dividing the applicable equally amongst all team members. Prize winners are responsible for any costs and expenses associated with prize acceptance and use not specified herein as being provided. Designation as a prize winner is subject to Entrant's/Entrant Team's proof of compliance with the Rules, maintaining compliance with these Rules and approval by the Sponsor. All details of prize not specified herein shall be determined solely by Sponsor.

## 7 Privacy

Proposal Entries include information relating to identified or identifiable natural persons (“**Personal Data**”), in particular name, title, email address, mailing address, phone number and age of Entrants as well as names of members of Entrant Teams. By submitting Personal Data of members of Entrant Teams in the Proposal Entry, Entrant represents and warrants that he/she has obtained all necessary permissions from all members of the Entrant Team to submit their Personal Data to Sponsor. Sponsor collects, processes, and/or uses Personal Data submitted in Proposal Entries for the purposes of the Competition in accordance with these Entry Terms, in particular for verifying the identity of Entrants and members of Entrant Teams, for administering the Competition and to contact the Entrant for the organization and execution of the Competition. Consents granted by Entrant for the collection, processing and use of data can be withdrawn by Entrant at any time with effect for the future.”

## 8 Indemnification and Acknowledgement

The Sponsor reserves the right, in his sole discretion, to disqualify any Entrant/Entrant Team found tampering with the entry process or entry materials or otherwise interfering with the proper administration of the Competition or violating the Rules.

Each Entrant/Entrant Team Member accepts the conditions stated in the Rules, agrees to be bound by the decisions of the Sponsor, warrants that he or she is eligible to participate in the competition, and agrees and release, indemnify, and hold harmless Sponsor and each of their parent companies, divisions, and subsidiaries, affiliates, advertising, promotion and public relations agencies, and the respective officers, directors, employees, representatives, and agencies of each from and against any and all claim, losses, liability, and damages of any kind, (including reasonable attorneys’ fees and expenses) asserted against any of them, incurred, sustained, or arising in connection with the use, acceptance, or misuse of the prize or while preparing for, participating in, and/or traveling to or from any competition-related activity, including, without limitation, any injury, damage, death, loss or accident to person, animal or property, or from the respective Entrants’/Entrant Teams breach of any agreement or warranty associated with the challenge, including the Rules. Any attempt to deliberately damage any website or undermine the legitimate operation of the challenge is violation of criminal and civil laws and, should such an attempt be made, the Sponsor and each of their licensees 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/Entrant Team member acknowledges and agrees that the relationship between themselves and the Sponsor is not a confidential, fiduciary, or other special relationship, and that the Entrant’s/Entrant Team’s decision to provide the Entry Proposal to Sponsor 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 Proposal, other than as set forth in the Rules. Each Entrant/Entrant Team also acknowledges that many ideas or stories may be competitive with, similar to, or identical to the Entry Proposal and/or each other in theme, idea, format, or other respects. Each Entrant/Entrant Team acknowledges and agrees that such Entrant/Entrant Team 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/Entrant Teams acknowledge that other Entrants/Entrant Teams may have created ideas and concepts contained in their Entry Proposal that may have familiarities or similarities to their Entry Proposal, and that they will not be entitled to any compensation or right to negotiate with the Sponsor because of these familiarities or similarities.

## 9 Responsibilities

Entrants/Entrant Teams further agree that the Sponsor and any of their respective parents, subsidiaries, affiliates, and each of their respective officers, directors, shareholders, agents and employees, and any Internet access providers are not responsible for the following: (a) electronic transmissions, Solutions or Entry Proposal that are lost, late, stolen, incomplete, damaged, garbled, destroyed, misdirected or not received by Sponsor 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'/Entrant Team R or any person's computer and/or its contents related to or resulting from participation in this Competition, or (d) causes that jeopardize the administration, security, fairness, integrity, or proper conduct of this Competition; (e) any Entry Proposal submitted in a manner that is not expressly allowed under these Rules (all such Entry Proposal will be disqualified); (f) any printing errors in the Rules or in any advertisements or correspondence in connection with this Competition. Sponsor reserve 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. In such cases, notice to this effect will be posted on the Competition Site. If, in Sponsor's 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 Sponsor reserves the right to void suspect Entry Proposals and/or terminate the Competition and award the prizes in its sole discretion. In the event of a dispute as to the identity of an Entrant/Entrant Team based on an email address, the Entry Proposal in question may be disqualified subject to the Sponsor's discretion.

## 10 Disputes

You agree that: (1) any and all disputes, claims and causes of action arising out of or connected with his 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 the Rules, or the rights and obligations of the Entrant/Entrant Team and Sponsor in connection with the Competition, shall be governed by, and construed in

accordance with, the laws of Germany without giving effect to any choice of law or conflict of law rules, which would cause the application of the laws of any jurisdiction other than Germany .

## **11 Sponsor**

Bayer AG, Leverkusen, Germany