

ZHAW digital

Call for Proposals: DIZH Fellowships

Second Call, Summer 2020

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Quick Checklist for Successful Applications

This is a quick checklist of what is most essential for a successful application as a DIZH Fellow. General remarks:

- The deadline for applications, including the letter of recommendation from your direct supervisor, is July 31, 2020, at 11:59 p.m. The application will be rejected if formal requirements, such as deadlines, length or other submission requirements are not met.
- After the deadline, the respective department heads will approve/veto each application.
 Therefore, it is highly recommended that you inform your line about your application beforehand.
- It is highly recommended to make use of the optional coaching session before applying.
 In the last call, it was noticeable that especially junior researchers had difficulties
 describing the "added value" of their research endeavor. This comprises 30% of the
 assessment score. The coaching is especially suitable to develop this aspect. See
 Sections 4 and 5.1.
- The application form asks for keywords. In part, the applications are assigned to reviewers based on those keywords. Thus, they are important and should range from rather general to specific.
- The complexity of the research endeavor should be commensurate with workload/pensum and duration. If they are not commensurate, it may have a negative impact on the scoring. There is no bias against more complex and hence larger proposals. See Section 4.
- Applicants are asked to self-assess their level of research experience and their supervisors will be asked to confirm whether they agree with the self-assessment. This information is used by reviewers to apply adequate assessment criteria. Therefore, it is important to give a *realistic* assessment (rather than being very conservative or overstate experience). See Section 4.

Specific to junior researchers¹:

• Junior researchers may submit up to 2 letters of reference in addition to the letter of recommendation from their supervisor to enhance/compensate their track record. These letters serve to highlight why applicants are outstanding *aspiring* researchers if their academic career has been too short to show many achievements (see Section 6).

Specific to lecturers:

 Lecturers are encouraged to present a research endeavor that, commensurate with the level of responsibility of their role, allows for the inclusion of a PhD student. See Section 4.1.

¹ The term "junior researchers" reflects research experience, not biological age. See Section 7.



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1. Introduction

The Cantonal Council of Zurich decided to launch the "Digitalisierungsinitiative der Zürcher Hochschulen" (DIZH) as of April 1, 2020. The aim of the DIZH is to strengthen the competitive position of the Canton of Zurich as a research and development hub in the field of digital transformation and to connect the research expertise of the University of Zurich (UZH), the ZHAW, the Zurich University of the Arts (ZHdK) and the Zurich University of Teacher Education (PHZH).

Within the DIZH research cluster, professors, senior researchers, research associates with a PhD and PhD students of all universities will conduct interdisciplinary research concerned with the digital transformation across all universities. Each university has its own mode of participating in the research cluster. The ZHAW has established a Fellowship Program ("DIZH Fellows") to sponsor its researchers and to enable their temporary participation in the DIZH research cluster.

Highly qualified researchers, who are already employed at the ZHAW, will receive the opportunity to collaborate with researchers from the other universities on relevant research endeavors within the DIZH research cluster at its location in Zurich. DIZH Fellows will be able to contribute and develop their expertise in order to actively shape the digital transformation and to create sustainable value for themselves, the DIZH and the ZHAW.

You can find out more about the current DIZH Fellows here.

2. Objectives

A DIZH Fellowship is meant to provide the opportunity for outstanding ZHAW researchers to create a visible and lasting impact and to contribute to the integration of the ZHAW and the DIZH research cluster. The following objectives are linked to this goal:

- Strengthening the DIZH Fellows' personal profiles, as well as their home organizational units, due to the competitive selection process (idea of excellence).
- Strengthening the ZHAW's research profile in the area of digital transformation; visibility of the ZHAW in the output of the DIZH research cluster and beyond.
- Strengthening the competencies of and the collaboration within the ZHAW digital community³; strengthening scientific connections between the DIZH research cluster and the departments and institutes at the ZHAW.
- Strengthening the impact of applied research on society, organizations and individuals, both nationally and internationally, in the area of digital transformation.

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² Digitalization Initiative of Zurich's Universities.

³ To be launched mid-2020.



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3. Framework Conditions

Who can apply?

The target audience consists of outstanding ZHAW researchers. In principle, the following ZHAW employees can apply to the DIZH Fellowship:

- research assistants as PhD students
- research associates with a PhD or in the process of earning a PhD
- lecturers, including professors

Therefore, the call addresses researchers ranging from PhD students, to experienced researchers, to experienced professors. Recognizing the variety of research careers at the ZHAW, the possibility to apply "sur dossier" is not precluded. During the review and rating of the application – according to the criteria laid out in Section 4 – the seniority of the applicant will be taken into account.

Junior researchers, especially PhD students, are strongly encouraged to apply for a DIZH Fellowship.

What is included in the sponsorship of a DIZH Fellow?

DIZH Fellowships are sponsorships for the applicants. This differs from typical project funding in that material expenses, and especially new positions, are generally not sponsored (with one notable exception, see next paragraph). The sponsorship thus consists of the funding of the respective workload/pensum that applicants are active as DIZH Fellows.

There is an extension to the "personal sponsorship" principle for lecturers and professors: to reflect their level of research experience and seniority, as well as to take into consideration their typical workload, they are encouraged to submit a research endeavor with an increased scope that requests additional funding for a junior researcher in addition to their personal commitment. If approved, applicants will receive additional funding for a PhD candidate at a 60% workload/pensum for the duration of their DIZH Fellowship, on top of the funding for their own workload/pensum as a DIZH Fellow. The PhD position needs only be filled at the beginning of the DIZH Fellowship (i.e. the PhD candidate does not need to be known at the time of the application). This is intended to promote junior researchers in their endeavors and increase the profile of the ZHAW as an attractive host of PhD students.

What is the possible extent of the DIZH Fellowship?

It is possible to apply for any duration between 3 and 24 months with a workload/pensum ranging from 20% to 80%. The remaining workload/pensum is performed within the existing employment and must be at least 20%. This rule is meant to ensure that DIZH Fellows and their



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research endeavors remain embedded within their home organizational units and to enable synergies.

Example: Someone with a workload/pensum of 80% can apply for a DIZH Fellowship of max. 60%. The remaining 20% are performed within the existing employment at the ZHAW.

For the duration of the DIZH Fellowships, the sponsored employees reduce their share of planned teaching and other research activities at their home organizational unit accordingly. In particular, the home unit has to ensure that lectures will be covered by other employees. If necessary, qualified replacements can be arranged and financed through the reduced personnel cost due to the employee sponsorship.

What topics are eligible for sponsorship?

A DIZH Fellowship serves as a personal sponsorship for outstanding researchers at the ZHAW with a concrete research endeavor in mind that is to be described as part of the application. In principle, research endeavors that deal with topics that are directly related to relevant questions of digital transformation are eligible for sponsorship. This especially includes the following topics, listed in alphabetical order:

- Artificial Intelligence (AI)
- Building Information Modeling (BIM)
- Cyber Security
- Data Science
- Digital x: Digital Health, Digital Business Models, Digital Learning, Digital Ethics, Digital Mobility etc.
- Smart X: Smart Cities, Smart Services, Smart Contracts, Smart Factories, Smart Grids
- x 4.0: Work 4.0, Society 4.0, Mobility 4.0, Industry 4.0 etc.
- x-Tech: MedTech, FinTech, EdTech, GovTech etc.

This list is not conclusive.

Research endeavors are eligible for sponsorship if they make a substantial contribution to the objectives of the DIZH Fellowship (see Section 2). This contribution must be made explicit in the application.

Research endeavors with an interdisciplinary character are a plus. Connections with other researchers' activities within the DIZH research cluster are desirable and must be illustrated.



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Where are the DIZH Fellows located?

The DIZH Fellows are physically located at the DIZH research cluster location for their respective workload/pensum⁴. The location is shared with the UZH "Digital Society Initiative" at Rämistrasse 69 in Zurich. This is necessary to enable and promote collaboration with other researchers in the cluster and to ensure that the ZHAW plays a visible and active role in all DIZH activities.

4. Selection Criteria

Applications will be evaluated by a Selection Board. It consists of ZHAW experts as well as external experts. The following criteria will be applied:

- Excellence of the applicant in applied sciences (40%)
 - Outstanding researchers of all levels are wanted.
 - This can be made visible through achievements in R&D that will be evaluated in three subcategories:
 - Content (e.g. publications and public presentations, patents if applicable, awards, notable professional and academic achievements, etc.)
 - Management (e.g. research projects including assumed role and outcomes, funding acquisition, supervised master and PhD students, notable achievements in research management, spin-offs if applicable, etc.)
 - Networking (e.g. visibility and contribution to the national and international scientific communities, membership in scientific boards and committees, etc.)
- Excellence of the research endeavor (30%)
 - Ideas that will likely make a visible impact are wanted.
 - The following two subcategories will be evaluated:
 - Expected impact of the research endeavor in the area of digital transformation (in terms of science and in terms of its application); this includes the endeavor's novelty and feasibility.
 - The degree to which the results of the endeavor will become tangible as a
 part of the overall contribution to applied sciences (each application
 should present its results respectively via deliverables, such as
 publications, demonstrators, videos, presentations, etc.)

⁴ Exceptions are special regulations related to COVID-19 etc., should they go on, or that the research endeavor needs special laboratories or other research infrastructure not available at the DIZH (in which case the applicant makes sure to spend the amount of time at the DIZH that is not necessarily spent with that infrastructure).



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- Expected added value for the ZHAW as a player in the digital transformation space (30%)
 - DIZH Fellows that will drive the DIZH and ZHAW ecosystems are wanted.
 - The following two subcategories will be evaluated:
 - Synergies with research endeavors at the ZHAW ("leveraging"), as well as the ZHAW's strategy, and the added value of the research endeavor for future research activities in the digital transformation space at the ZHAW (e.g. follow-up projects, new working groups or research directions, etc.)
 - Networking and synergies with the DIZH, for instance through high visibility of the ZHAW in the DIZH research cluster as well as collaboration and synergies with other members of the cluster beyond the duration of the DIZH Fellowship.

A successful application must reach a specific threshold in all three categories, which are evaluated based on a 10-point scale in the respective sub-categories. The final ranking is determined by a score that is calculated using the above criteria and their respective weight.

The level of research experience of the applicant (e.g., junior vs senior researcher), especially when it comes to scientific achievements (e.g. publications, funds acquired, etc.), will be considered in the assessment. To this end, applicants will self-assess their level of research experience. Applicants will be compared to their peer group in their academic discipline during the assessment. This ensures a fair treatment of junior researchers (i.e. their achievements will not be compared to those of a senior researcher with much more experience).

4.1. Applications by Lecturers - Increased Scope

Lecturers as well as professors are encouraged to submit research endeavors that require support by a PhD student due to their nature or scope. In the application, applicants will find a corresponding question. The necessity and the scope of the support should be evident from the description of the research endeavor itself.

The corresponding applications will be assessed based on the personal accomplishments of the applicant (as well as the other criteria listed above). The PhD student does not have to be known or named at the time of applying. The applicant simply guarantees to have a PhD student ready at the beginning of the DIZH Fellowship and to have secured their supervision (incl. a declaration of intent of placement in a PhD program or comparable vehicle to ensure accreditation through a PhD-granting institution). This enables the partial financing of a PhD for an existing ZHAW employee or the recruitment of a PhD student as a new ZHAW employee.



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5. Procedure

The procedure of this call is as follows:

- 1. The call opens on May 08, 2020, and closes on July 31, 2020, at 11:59 p.m. The complete application must be received by ZHAW digital before this deadline (see Section 6).
- 2. Before the deadline, applicants have the opportunity to receive individualized coaching by members of the ZHAW digital Core Team and previously successful DIZH Fellows (see Section 5.1).
- 3. The department heads will approve/veto each application after the deadline. Make sure to inform your line about your application in advance to ensure it will be approved.
- 4. In a first selection round, the applications will be evaluated by the Selection Board according to the criteria laid out in Section 4.
- 5. The second round consists of interviews with the Selection Board for all applicants who moved on from phase 1. Please be sure to block your calendar (see section 5.2).
- 6. The results of the first and second rounds are compiled in a ranked listing.
- 7. The ZHAW digital Strategic Council⁵ decides up to which rank DIZH Fellowships will be sponsored.
- 8. Applicants will receive feedback by the end of 2020.

Successful DIZH Fellows will begin their DIZH Fellowships in the following year.

5.1. Coaching (optional)

To support potential DIZH Fellows with their application, the ZHAW digital Core Team members (that are part of the Selection Board), and previously successful DIZH Fellows, offer one individualized coaching session per applicant. This optional coaching session is meant to ensure that the proposed research endeavor most effectively covers the selection criteria of the DIZH Fellowship (see Section 4). Special emphasis is placed on the third criterion "Expected added value for the ZHAW as a player in the digital transformation space".

Applicants who are interested in a coaching session should contact ZHAW digital at dizh-fellowship@zhaw.ch at the latest, one month before the deadline – i.e., by June 30, 2020 – to ensure an appointment slot for the session can be found.

⁵ The Strategic Council consists of the board members of the ZHAW and the co-leadership of ZHAW digital.



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5.2. Timeline

	What?	Who?	When?
Application Phase	Application opens	Applicant	May 08, 2020
	Coaching (optional)	Applicant with a member of the ZHAW digital Core Team and potentially a successful DIZH Fellow	May–July 2020 (deadline for appointment: June 30, 2020)
Appli	Application closes	Applicant	July 31, 2020
	Department heads approve/veto applications	Deans of Departments	August 7, 2020
Selection Phase	Selection phase 1 (evaluation)	Selection Board (internal and external experts)	August–October 2020
tion F	Feedback to applicants about results of phase 1	ZHAW digital office	October 30, 2020
Selec	Selection phase 2 (interviews – please block calendar)	Selection Board with successful applicants from first round	November 30– December 04, 2020
_	Create finalized ranking list	Selection Board	December 2020
Decision Phase	Determine the cut-off point on the ranked list	ZHAW digital Strategic Council	December 17, 2020
Dec	Feedback to applicants about results of phase 2	ZHAW digital office	December 21, 2020
Fellowship Start	Start of the first DIZH Fellowships	Successful DIZH Fellows	January 2021

6. Application

A complete application for a DIZH Fellowship consists of the following elements (see additional explanations below):

- 1. Completed application form including research proposal on the ZHAW digital portal https://zhawdigital.grantplatform.com (see Section 6.1)
- 2. Scientific CV (max. 2 pages)



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- 3. 1 letter of recommendation (max. 2 pages) written by the applicant's direct supervisor.
 - 3.1. Junior Researchers may also supply up to 2 additional letters of reference.
- 4. Attachments
 - 4.1. List of publications and patents
 - 4.2. List of presentations (incl. designation as national/international/keynote)
 - 4.3. List of acquired projects and funding (name, duration, funding amount, funder (e.g. Innosuisse/CTI/SNF/EU etc.), own role in the project team)
 - 4.4. One artifact of choice to highlight the quality of your own work (e.g. a publication, open source software as code-repository, feedback from others etc.) of max. 10 pages (if necessary, shorten the artifact and include a link to the full version).

Additional explanations:

Scientific CV

Aside from the usual information about the applicant's academic and professional career, the CV should contain information about possible startups/spinoffs, awards, number of supervised students from Master level up, appointments within the subject's research community, memberships in committees etc., as well as other notable achievements during the applicant's studies and/or career. This is especially relevant for junior researchers.

Letter of recommendation and letters of reference

The letter of recommendation is written and signed by the direct supervisor of the organizational unit where the applicant is employed. It addresses the applicant's professional and scientific qualities, the connection between the proposed research endeavor and the R&D-strategy of the institute/center, as well as the possibilities to integrate or make permanent the research after the end of the DIZH Fellowship.

To facilitate showing personal excellence despite a shorter scientific career, junior researchers may submit up to 2 additional letters of reference. The second and third letter may be written by people external to the ZHAW and should explicitly focus on highlighting the reasons why the applicant is an especially outstanding aspiring researcher and thus a well-suited candidate for the DIZH Fellowship.

Research proposal

The research proposal describes the research endeavor and, in particular, takes into account its subject-excellence, the potential impact of its results (which may require statements about feasibility, relevancy and novelty), and its potential to be tied to other research within the DIZH research cluster and the ZHAW as a whole. This includes demonstrating how it can be linked to the strategy and research of the applicant's home organizational unit at the ZHAW. In addition, it expounds on how the DIZH Fellowship will generate sustainable added value for the DIZH research cluster and the ZHAW digital community. This last aspect can be shaped during an optional coaching session (see Section 5.1).



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6.1. Submission Process

To submit an application, navigate to <u>zhawdigital.grantplatform.com</u> and create an account. Do not use Internet Explorer.

- Use your real name and your ZHAW email address to create an account.
- Once logged in, you can create a new application.
- The information you enter gets auto saved once you have completed the first tab.
- You can only submit one application.
- You can make changes to your application until you submit. After that, your application is final.
- Your direct supervisor and if you are a junior researcher your references (see Section 6) will be contacted automatically through this tool. They will then be able to submit their letters of recommendation/reference directly.
- They will be notified only once you submit your application in the system and
 they need to upload their letters by the deadline on July 31, 2020, at 11:59 p.m. We
 recommend that you get in touch with them well in advance of the deadline and
 inform them that they will receive a notification from ZHAW digital via "awardforce".
 - Applications missing direct supervisor approval and letters of recommendation by the deadline will be considered incomplete and will be rejected.
 - Applications missing letters of reference (only for junior researchers) will be considered complete and will advance to the first review round.
- If you, your direct supervisor or your references do not receive any emails from the tool, check your spam folder.

If you cannot use this tool or have any questions, please contact us.

7. Questions to Be Answered During Submission Process

- Summary information:
 - Title of the research endeavor
 - Abstract of the research endeavor (max. 300 characters)
 - Keywords (up to 5, used to select reviewers)
- Applicant's details:
 - Applicant's name
 - Academic degrees
 - Date of birth



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- ZHAW short username
- Phone number
- Formal position at the ZHAW: WiAs / WiMa / Lecturer
- Self-assessment of research experience:

Please rate yourself according to your full-time years (FTY) in research. For this, you typically count employments of 50% workload/pensum and above at a university, research institute, industrial research department etc. after your degree that gives access to doctoral studies:

- junior researcher (usually PhD student, approx. 0–6 FTY) /
- experienced researcher (usually with a PhD, approx. 4–10 FTY) /
- senior researcher (typically with higher-level responsibilities e.g. for a research area, from approx. 8 FTY on)
- o Role at the ZHAW (a description that helps put you into the correct peer group)
- Home institute and department

Fellowship details:

- o Desired duration of DIZH Fellowship (in months, between 3 and 24 months)
- Desired workload/pensum of DIZH Fellowship (in percent, between 20 and 80%)
- Desired starting date (in 2021)
- For lecturers only:
 - applying for funding of the applicant plus additional PhD student / applying for funding of the applicant only

Research endeavor:

- Why are you among the outstanding researchers at the ZHAW? (max. 1,000 characters; refer to CV and attachments for proof/details)
- Research proposal (max. 5,000 characters)
- What is the research endeavor's connection to and impact on digital transformation, especially within the context of applied research? (max. 1,000 characters)
- What will the results at the end of the DIZH Fellowship be (e.g. scientific result/publication, pilot, etc.)? (max. 1,000 characters)
- How will these results become tangible (e.g. scientific publication, video-documentation, demonstrator, etc.) and for which target audience(s) (e.g. scientific community, general public, industry)? (max. 1,000 characters)
- What else will happen with the results of the DIZH Fellowship? What are the plans to further pursue the resulting achievements at the ZHAW? (max. 1,000 characters)
- Are there possible points of connection for collaborating with other members of the DIZH research cluster (or other researchers at UZH/PHZH/ZHdK)? (max. 1,000 characters)



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Formal checks:

- I can personally attend an assigned interview slot on one of the days during the period between November 30, 2020, and December 04, 2020: yes / no
- o I will start a granted DIZH Fellowship in the year 2021: yes / no
- I will work physically at the location of the DIZH for a granted DIZH Fellowship workload/pensum: yes / no

8. Contact

For questions about this call as well as to schedule a coaching session (see Section 5.1), please contact:

ZHAW digital Gertrudstrasse 15 8401 Winterthur

Tel.: +41 (0) 58 934 54 15

E-Mail: dizh-fellowship@zhaw.ch

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