Doctoral Researcher or Post-Doctoral Researcher in Computational Solid Mechanics
Aalto University

Job Title	Doctoral Researcher or Post-Doctoral Researcher in Computational Solid Mechanics
Department	T214 Civil Engineering
Institution	Aalto University , , Finland
Date Posted	Dec. 20, 2024
Application Deadline	Open until filled
Position Start Date	Available immediately
Job Categories	Graduate Student
Academic Field(s)	Mechanical Engineering
Job Website	https://aalto.wd3.myworkdayjobs.com/aalto/job/Otaniemi-Espoo-Finland/Doctoral-Researcher-or-Post-Doctoral-Researcher-in-Computational-Solid-Mechanics_R41813
Apply By Email	

Job Description

Aalto University is a community of bold thinkers in which science and art meet technology and business. We are committed to identifying and solving grand societal challenges and building an innovative future. Aalto University has six schools with 12 000 students and nearly 400 professors. Our campuses are in Espoo, Finland.

The School of Engineering is an international unit with nearly 70 talented professors and 3400 full-time students. Currently, the Department of Civil Engineering has 20 professors together with lecturers, staff scientist, post-doctoral researchers, doctoral students, and technical staff. In total, the number of departmental personnel is over 100.

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MECHANICS

We seek a highly qualified, talented and motivated individual, with an enthusiastic attitude towards high-quality research, to work as a Doctoral Student or Post-doctoral Researcher at the Department of Civil Engineering in the team of Computational Structural Engineering supervised by Associate Professor Jarkko Niiranen: [url=https://research.aalto.fi/fi/persons/jarkko-niiranen]https://research.aalto.fi/fi/persons/jarkko-niiranen.

Full-time doctoral studies are expected to last for three to four years and require passing a mid-term review:
[url=https://www.aalto.fi/en/study-options/aalto-doctoral-programme-in-engineering]https://www.aalto.fi/en/study-options/aalto-doctoral-programme-in-engineering

Post-doctoral researcher’s contract is extended on a yearly basis according to the actual funding situation and work performance.

Job desription
The research activities of the candidate will focus on the theoretical and computational analysis of lattice structures such as origami fold core sandwich structures within the theories of elasticity, elasto-plasticity and elasto-plastic damage. Research activities will involve numerical methods relying on physics-based continuum models and validated via experiments.

The teaching assistant duties of the position are limited to about ten percent of working hours and related to the Master’s Programme in Building Technology, on such courses as Engineering Computation and Simulation, Finite Element Methods in Civil Engineering, Mechanics of Beam and Frame Structures, Mechanics of Plate and Shell Structures, Stability of Structures or Material Modeling in Civil Engineering. Possibilities for serving as an instructor for Bachelor’s and Master’s Thesis students are available as well.

The wage of the position will be paid according to the salary scheme of Aalto University School of Engineering.

Qualification requirements
By the time of recruitment, the selected candidate for doctoral studies should have a master’s degree in a related field obtained within the last three years: e.g., civil engineering, mechanical engineering or applied mathematics. The candidate should have excellent grades from the bachelor and master level courses in mathematics and mechanics as well as appropriate skills in programming and finite element analysis. Proficiency in written and spoken English are required as well. Experience in co-authoring

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scientific articles in high-quality journals is not a necessary requirement but an advantage.

For the candidate qualified for the position, an official application process for doctoral studies will be accomplished. Hence, before submitting their application, the candidate should ensure that the corresponding formal requirements are fulfilled: [url=https://www.aalto.fi/en/doctoral-education/how-to-apply-for-doctoral-studies#5-general-eligibility-and-academic-evaluation]https://www.aalto.fi/en/doctoral-education/how-to-apply-for-doctoral-studies#5-general-eligibility-and-academic-evaluation

By the time of recruitment, the selected candidate for post-doctoral research should have a doctor’s degree in a related field obtained within the last three years: e.g., civil engineering, mechanical engineering or applied mathematics. The candidate should have excellent grades from the bachelor and master level courses in mathematics and mechanics as well as appropriate skills in programming and finite element analysis. Proficiency in written and spoken English are required as well. Experience in co-authoring scientific articles in high-quality journals is a necessary requirement.

Application process
The application material should be submitted in English as a single pdf-file, compiled in the following order: * Motivation letter - including contact information (max. 1 page) * Curriculum vitae - including contact information for one reference (max. 2 pages) * University degree certificates - including translations to English (if the originals are not in English, Finnish or Swedish) * Transcripts of records - starting from bachelor studies * Language certificate - meaning a proof of proficiency in English (if the applicant is not a native speaker of English or has not received education in English) * List of publications

The application should be sent through the electronic recruitment system (Apply now! -link below) no later than January 31st, 2025. Applications from other channels will not be evaluated.

Short-listed candidates will be invited to an on-site or on-line interview.

The employees and visitors of Aalto University should apply for the position via the internal system Workday (Workday à Internal jobs) by using their existing Workday user account (not via the external webpage about open positions).

For additional information, please contact HR Generalist Jenna Koskenniemi (fistname.lastname@aalto.fi).

Aalto University reserves the right for justified reasons to leave the positions open, to extend the

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application period and to consider candidates who have submitted their application outside the application period.

Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact

Finland