

Postdoctoral Researcher in Analog building block design  
and procedural circuit optimization with Berkeley Analog  
Generator  
Aalto University

Direct Link: <https://www.AcademicKeys.com/r?job=248376>

Downloaded On: Nov. 21, 2024 3:19pm

Posted Nov. 7, 2024, set to expire Mar. 9, 2025

**Job Title** Postdoctoral Researcher in Analog building block  
design and procedural circuit optimization with Berkeley  
Analog Generator

**Department** T411 Dept. Electronics and Nanoeng

**Institution** Aalto University  
, , Finland

**Date Posted** Nov. 7, 2024

**Application Deadline** Open until filled

**Position Start Date** Available immediately

**Job Categories** Post-Doc

**Academic Field(s)** Electrical and/or Electronics

**Job Website** [https://aalto.wd3.myworkdayjobs.com/aalto/job/Otaniemi-Espoo-Finland/Postdoctoral-Researcher-in-Analog-building-block-design-and-procedural-circuit-optimization-with-Berkeley-Analog-Generator\\_R41300-3](https://aalto.wd3.myworkdayjobs.com/aalto/job/Otaniemi-Espoo-Finland/Postdoctoral-Researcher-in-Analog-building-block-design-and-procedural-circuit-optimization-with-Berkeley-Analog-Generator_R41300-3)

**Apply By Email**

### Job Description

The rumors about the death of Analog electronics are premature, as Analog just went Programmatic. If you are willing to learn how to design Analog microelectronics by developing optimization procedures for parametrized implementations with Python, here is an opportunity for you to join the programmatic hardware design activities of Aalto Microelectronics Research Center (<https://metka.aalto.fi>).

Analog building blocks are needed in every piece of microelectronics and Systems-on-Chip, like digital circuitry and microprocessors. Programmatic design methodology aims to provide parametrized and procedurally optimized analog building blocks for these needs. Berkeley Analog Generator is a design environment recently developed in University of Berkeley which enables analog circuit design by

Postdoctoral Researcher in Analog building block design  
and procedural circuit optimization with Berkeley Analog  
Generator  
Aalto University

Direct Link: <https://www.AcademicKeys.com/r?job=248376>

Downloaded On: Nov. 21, 2024 3:19pm

Posted Nov. 7, 2024, set to expire Mar. 9, 2025

programmatically means. In Aalto we are looking for pioneers with enthusiasm to learn to take this new methodology into use. If you want to be a game changer, this is your moment.

We are looking for a postdoctoral researcher to work with us on this area of research.

Successful execution of the work requires fluent unix working habits, Git version control, shell scripting and Python programming, complemented with doctoral level knowledge of analog design tools and methodology added with strong theoretical understanding about optimization algorithms. Topic focuses on implementation of analog building blocks for A/D converters, sensor interfaces, 5G mmWave circuits, radio transmitters and receivers according to your preferences, within the scopes of our research projects. The position is appropriate for post-docs eager to learn, and willingness to develop the circuits and design methodologies of the future. Minimum entry criteria is D.Sc. or PhD degree in microelectronics design and working proficiency in English.

We offer

The starting salary is approximately 4000 eur/month depending on the experience. The position will be filled for 1-3 years. The salary will be based on both the job requirements and the employee's personal performance in accordance with the salary system of Finnish universities. We offer a wide range of staff benefits, such as occupational health care, flexible working hours, excellent sports facilities on campus and several restaurants and cafés on campus with staff discounts. The position is located at the Aalto University Otaniemi campus which can be easily reached by public transport.

Join us!?

To apply, please share the following application materials with us through our recruitment site (&#34;Apply now!"). ?

All material should be submitted in English and a pdf-file. You can send in max. Five (5) documents up to 5M bit in size. Application material should include:?? \* Letter of motivation (max. one page). Please describe your background and future plans.??? \* A curriculum vitae and possible list of publications with complete study and employment history, contact details of referees from 2 senior academic people. We will contact your referees, if recommendation letters are required.? (please see CV example

[url=https://view.officeapps.live.com/op/view.aspx?src&#61;https%3A%2F%2Ftenk.fi%2Fsites%2Fdefault%2F06%2FTENK\_CV\_template\_2020.docx&wdOrigin&#61;BROWSELINK%22%20t%20%22\_blank]TENK\_CV\_t (live.com) )?? \* A study transcript provided by the applicant's university that lists studies completed and grades achieved.??

The call is open until the 30th of November 2024, but we will start reviewing and interviewing

Postdoctoral Researcher in Analog building block design  
and procedural circuit optimization with Berkeley Analog  
Generator  
Aalto University

Direct Link: <https://www.AcademicKeys.com/r?job=248376>

Downloaded On: Nov. 21, 2024 3:19pm

Posted Nov. 7, 2024, set to expire Mar. 9, 2025

candidates immediately. We encourage you to apply as soon as possible.

Please note: Aalto University's employees should apply for the position via our internal HR system Workday (Internal Jobs) by using their existing Workday user account (not via the external webpage for open positions). Aalto University's students and visitors should apply as external candidates with personal (not aalto) email.

Want to know more?

Further information please contact Associate Professor Marko Kosunen,

[\[url=mailto:marko.kosunen@aalto.fi\]](mailto:marko.kosunen@aalto.fi)marko.kosunen@aalto.fi.

Aalto University reserves the right to leave the positions open, extend the application period, reopen the application process, and consider candidates who have not submitted applications during the application period. In any recruitment process related questions, please contact HR Partner Karoliina Walldén

[\(\[url=mailto:karoliina.wallden@aalto.fi%22%20t%20%22\\_blank\]](mailto:karoliina.wallden@aalto.fi)karoliina.wallden@aalto.fi).?

Aalto University is where science and art meet technology and business. We shape a sustainable future by making research breakthroughs in and across our disciplines, sparking the game changers of tomorrow and creating novel solutions to major global challenges. Our community is made up of 13 000 students, 400 professors and close to 4 500 other faculty and staff working on our dynamic campus in Espoo, Greater Helsinki, Finland. Diversity is part of who we are, and we actively work to ensure our community's diversity and inclusiveness. This is why we warmly encourage qualified candidates from all backgrounds to join our community.

The Department of Electronics and Nanoengineering conducts research and arranges related courses in the fields of electromagnetics, micro and nanotechnology, radio engineering, and space technology. The department research groups have active national and international collaboration with several institutes and companies. Research groups are working with world-class research facilities and instruments; the largest clean rooms in the Nordic countries are located in the Micro- and nanotechnology centre Micronova.

### Contact Information

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

Postdoctoral Researcher in Analog building block design  
and procedural circuit optimization with Berkeley Analog  
Generator  
Aalto University

Direct Link: <https://www.AcademicKeys.com/r?job=248376>

Downloaded On: Nov. 21, 2024 3:19pm

**Contact** Posted Nov. 7, 2024, set to expire Mar. 9, 2025

Finland