



NEC Laboratories Europe (NLE) is soliciting proposals for its Student Research Fellowship program. The intent of the program is to allow PhD students and postdocs to propose, plan, and execute their cutting-edge research projects with mentors from one of the leading research labs in Europe. A senior member of the research staff at NEC Labs Europe will be assigned to each funded project as a mentor of the project. Mentors will coordinate research execution and the interaction between the awardee and NLE. The research awards are made out as unrestricted gifts to the student's universities to support the student's work and pay their salary for up to one year. Awardees can work on their projects remotely. We especially encourage applications from researchers with a diverse background and specifically encourage women to apply.

NEC Student Research Fellowship Program

[ref: 2012-391-ML]

We solicit proposals on the topics listed below

Beyond 5G and 6G

- Virtualized Mobile Networks Systems
- Smart Edge Systems
- Smart/Reconfigurable Intelligent Surfaces
- Secure Beyond 5G Systems
- Wireless Sensing

Machine learning and artificial intelligence

- Graph-based and geometric deep learning
- Explainable AI
- Discrete-continuous learning
- Information Extraction
- Knowledge-intensive NLP

Privacy and Security

- Distributed systems security and privacy
- TEE security
- Formal methods and policy compliance checkers
- Privacy Enhancing Technologies
- Adversarial learning or privacy-preserving ML

Software Systems

- Programming models, languages, and compilers for accelerated computing and/or disaggregated architectures
- Operating systems and system security for heterogeneous systems
- Verification and testing, and their impact on software design and security
- Program synthesis for high-performance computing
- Machine learning methods for software systems' operations
- Scalable performance and security monitoring for cloud and edge-cloud systems

All applications should contain:

- (A) a short proposal document,
- (B) the CV of the applicant and
- (C) at least two recommendation letters.

The proposal document should be up to three pages and consist of three parts: (1) Background and motivation; (2) Research proposal and execution timeline; (3) data availability (e.g., data is available for commercial purposes). The proposal should also list the duration (up to a maximum of 12 months), the expected budget for the salary (and associated overhead), and additional budget items required to execute the research plan. The maximum allowed budget per project is €100,000.

In addition to the proposal document, we require a CV with up to 3 pages. The CV should emphasize prior research and software engineering experience. The CV does not count towards the three-page proposal document limit. NLE cannot accept proposals with the aim of working with personal, confidential, or proprietary data.

Eligibility:

Full-time PhD students and postdocs from accredited universities worldwide are eligible to apply. Candidates may only submit one proposal per funding cycle and will be evaluated based on a combination of factors, including academic performance, SW development skills, and aptitude for research.

NEC Laboratories Europe GmbH, located in Heidelberg, Germany was established in 1997. Since then we have been constantly fueled by new ideas and are passionate about bringing them to the real world. Among us there are researchers and experts from more than 25 countries, half of which are PhD holders, who have contributed to our excellent reputation in Europe. A defining attribute of NEC Laboratories Europe is our inclination towards open innovation. We collaborate with universities, research institutes, other corporate research centers and potential users in a co-creation mode, leading to breakthrough innovation combined with market-orientation. We are based in the heart of Heidelberg, one of the most beautiful cities and the oldest university city in Germany.

Submission:

Please send your application **by 31 January 2021**

electronically via the applications web system

<https://www.neclab.eu/join-us>

with reference to **[2012-391-ML]**.

Reference letters should be submitted to:

reference-letters@neclab.eu (please indicate the name of the applicant they are for).

Important dates:

January 31st, 2021: deadline for applications

February 2021: decision of acceptance/rejection

March 2021: approximate start of fellowship

For questions please contact:

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