Principle Research & Development Engineer II, Embedded Software in Burlington, MA for Northeastern University

main.hercjobs.org/jobs/22156621/principle-research-development-engineer-ii-embedded-software



Principle Research & Development Engineer II, Embedded Software

Northeastern University

Details

Posted: 28-Mar-26

Location: Burlington, Massachusetts

Type: Full-time

Categories:

Academic/Faculty

Computer/Information Sciences

Internal Number: 7036288



Principle Research & Development Engineer II, Embedded Software

About the Opportunity

This is a 1-year fixed-term position, renewal based on available external funding.

The Kostas Research Institute (KRI) at Northeastern University (NU) - a rapidly growing institute that conducts cutting-edge applied R&D - is seeking a highly motivated and enthusiastic Principle/Senior Research & Development (R&D) Engineer with expertise in Embedded Software Engineering. The Senior R&D Engineer is expected to work as part of a multi-disciplinary team and contribute to the successful execution of R&D projects.

Responsibilities include providing subject matter expertise and technical contributions as an embedded software engineer for a wide range of projects requiring computing systems design and realization, including machine learning (ML) and artificial intelligence (AI) applications, autonomy, cognitive and distributed sensing and communication, advanced manufacturing, and decision support systems, among others. The Senior R&D Engineer will

work collaboratively with multi-disciplinary teams across the KRI consortium, consisting of academic and industry partners, to create solutions and prototypes for projects in these application areas. Level of position will be based on education and experience.

Successful candidates will be responsible team leaders, passionate about cutting-edge/emerging computer hardware and software technologies, possess a deep understanding of software architectures and experience in turning such technologies into practical, state-of-the-art systems. A close working relationship with and support of KRI Senior R&D Engineers/Scientists for government and industry contracts will be required.

The Kostas Research Institute was founded, focusing on homeland security research and development. Today, KRI strives to advance resilience in the face of 21st-century risks across a wide range of technologies, emphasizing a collaborative approach that leverages our R1 university intellectual capital and technologies to develop application-specific solutions to customer needs. KRI focuses on satisfying customer-driven needs by co-locating a diverse, highly skilled R&D team that can address all aspects of a particular problem across the full range of technology-readiness levels. KRI headquarters, located at the NU Innovation Campus in Burlington, MA (ICBM), is home to one-of-a-kind research and test facilities for conducting activities related to cognitive and distributed RF signal processing and machine learning, unmanned and autonomous system technologies, as well as quantum materials and sensing.

This position is with KRI at Northeastern University, LLC, a wholly-owned subsidiary of NU. The primary office for this position is located at NU's ICBM. Through NU, KRI offers an impressive benefits package, including multiple retirement plan options with extremely generous matching, as well as tuition waivers for classes and advanced degree programs. A full description of available benefits can be found on the NU website.

Qualifications

Required Qualifications:

Education and Experience

- B.S. Electrical Engineering / Computer Engineering or a related field.
- At least 10 years of relevant experience.

Skills/Attributes

- Proficiency in robotic software architecture design.
- Experience in UAS vehicle executive design.
- Experience with smart battery design.
- Experience with motor control software.
- Experience with Xilinx Zynq, Nvidia or snapdragon processors.

- Proficiency in developing, testing, and deploying software packages for edge, desktop, enterprise, and/or cloud computing platforms.
- Experience with databases including database and/or API design.
- Proficiency in high-level object-oriented programming and scripting languages, such as Python, C++, C#, Java, JavaScript, etc.
- Interest in Computer Vision, ML, and AI concepts.
- Ability to lead a small team of engineers and share knowledge with others.
- Self-motivated and capable of independently planning and executing technical projects.
- Ability to quickly adapt in working with novel/emerging technologies.
- Passion for developing new prototypes and solutions.
- A passion for learning and constantly expanding knowledgebase.
- US Citizenship with the ability to obtain a DoD security clearance.

Additional Desired Qualifications:

Education and Experience

M.S. Electrical Engineering or Computer Engineering or related field.

Skills/Attributes

- Experience with Altium Design
- Experience with GitHub software
- Experience with TAK/ATAK
- Experience with low-level programming and scripting languages, such as C/Assembly, TCL, VHDL/Verilog, SystemC, etc.
- Experience in applying for research and development funding.
- Proficient with Oscilloscopes, Logic Analyzers Function Generators and Spectrum Analyzers.

Required: US Citizenship with ability to obtain clearance. Preferred: Active DoD secret clearance or above, ability to obtain Special Access clearance

Travel is required to support briefings, presentations, field tests, etc.

Position Type

Research

Additional Information

Northeastern University considers factors such as candidate work experience, education and skills when extending an offer.

Northeastern has a comprehensive benefits package for benefit eligible employees. This includes medical, vision, dental, paid time off, tuition assistance, wellness & life, retirement- as well as commuting & transportation. Visit https://hr.northeastern.edu/benefits/ for more information.

All qualified applicants are encouraged to apply and will receive consideration for employment without regard to race, religion, color, national origin, age, sex, sexual orientation, disability status, or any other characteristic protected by applicable law.

Compensation Grade/Pay Type:
115S

Expected Hiring Range:
$157,130.00 - $227,840.00

With the pay range(s) shown above, the starting salary will depend on several factors, which may include your education, experience, location, knowledge and expertise, and skills as well as a pay comparison to similarly-situated employees already in the role. Salary ranges are reviewed regularly and are subject to change.

To apply, visit https://northeastern.wd1.myworkdayjobs.com/en-US/careers/job/Burlington-MA/Principle-Research---Development-Engineer-II--Embedded-Software_R138216

Copyright 2025 Jobelephant.com Inc. All rights reserved.

Posted by the FREE value-added recruitment advertising agency

jeid-923627b4873ca34db3d0feda1b82d06b

Northeastern University

About Northeastern University

Founded in 1898, Northeastern University is a private research university located in the heart of Boston. Northeastern is a leader in worldwide experiential learning, urban engagement, and interdisciplinary research that meets global and societal needs. Our broad mix of experience-based education programs?our signature cooperative education program, as well as student research, service learning, and global learning?build the connections that

enable students to transform their lives. The University offers a comprehensive range of undergraduate and graduate programs leading to degrees through the doctorate in nine colleges and schools.

https://main.hercjobs.org/jobs/22156621/principle-research-development-engineer-ii-embedded-software