Position Title: STEM Education Specialist - Computer Science Research
FTE: 0.75 - 1.0 FTE
Salary Range: $60,000- 80,000 dependent on experience
Starting Date: ASAP
Location: Augusta, Maine (with hybrid or remote options)

The Maine Math & Science Alliance (MMSA) is a 501(c)3 nonprofit organization that finds inspiring new ways to get people excited about science, technology, engineering and mathematics today, so that our youth can become the innovators and workforce of tomorrow. MMSA supports educators by:
- Developing professional development experiences for and with K-12 educators
- Conducting research and evaluation of STEM learning experiences
- Building relationships and networks to sustain systemic statewide improvement ● Providing high-quality professional development and programming that can influence the future of our state

MMSA nurtures a work culture that is very team-oriented, welcomes a mix of diverse staff with diverse backgrounds and includes some of the best talent in STEM education, including researchers and curriculum specialists. We offer ample opportunities for professional development for continuous growth and skill enhancement.

Maine Mathematics and Science Alliance (MMSA) is seeking a versatile and motivated STEM Education Specialist with a focus on Computer Science (CS) Research and Professional Development. This position offers a unique opportunity to shape the future of CS education in Maine by integrating CS into K-12 classrooms through building a portfolio of co-designed innovative research and professional development with and for educators. The ideal candidate will have a strong background in both CS education research and practice, with a preference for candidates familiar with quantitative research methods.

Initially, the Specialist will play a key role in the established RPP STEM Workforce Ready 2030 project as well as the new NSF-funded, "Collaborative Research: Building Teacher Capacity for Designing Transdisciplinary Learning Experiences" project, a collaboration with Boston College. This role involves establishing relationships with rural Maine schools, revising professional learning experiences customized to the needs and assets of rural educators, and networking with academic and community partners.

Key Responsibilities:
Research and Data Analysis:
- Add capacity to MMSA's CS team, specifically building capacity in CS education research grounded in practice
- Work closely with practitioners to create and implement equity-driven research designs to advance CSI STEM learning
- Leverage both qualitative and quantitative methods to answer research questions related to CS education, preference given to excellent background and demonstrated

strong experience in quantitative methods
- Lead planning efforts advancing the CS education research project portfolio within MMSA and with partners across the nation
- Lead dissemination initiatives including peer reviewed journal articles, presentations, reports, conferences, and other research-based dissemination efforts as needed ● Design, implement, or oversee research and evaluation studies
- Identify or create, as needed, appropriate learning assessment instruments
- Share skills with other research and project staff, as appropriate

Grant Writing and Research Development:
- Lead the writing and development of grant proposals aimed at integrating computer science into K-12 education.
- Establish and grow a research agenda focused on CS education, with the goal of securing sustained funding for CS initiatives.

Professional Development Delivery:
- Deliver high-quality professional development programs to educators, and help them implement a physical computing-anchored transdisciplinary curriculum.
- Facilitate summer institutes and professional learning activities, ensuring educators are equipped to adapt and implement CS and transdisciplinary instruction in their classrooms.

Networking and Collaboration:
- Build and maintain relationships with rural Maine schools, ensuring that professional learning programs are tailored to meet the unique needs of these communities. ● Engage with teachers and school leaders to support the implementation of research-based CS education practices.

Education & Experience
- PhD or equivalent education and experience, preferably in education, computer science, STEM education, or a related field
- Significant experience in delivering professional development to educators and conducting mixed-method research studies.
- Strong mixed-methods research skills, including experience with statistical software such as SPSS or R; familiarity with qualitative analysis tools like Dedoose is desirable. ● Proven track record in writing and securing grant funding for educational research or initiatives.
- Demonstrated ability to independently manage and manipulate databases and spreadsheets.
- Experience with Research and Practice Partnerships preferred
- Strong analytical thinking with attention to detail.
- Excellent interpersonal skills, with the ability to work collaboratively within a remote-based team and independently drive projects forward.
- Proficiency with software such as Microsoft Excel and Word, as well as cloud-based systems like Google Drive, and Airtable, and video conferencing applications like Zoom. ● Strong oral and written communication skills.
- Adaptability to work with a wide range of personalities and interests.

Benefits of the Job:
- Attractive health plan with low to no contributions

- Employer-paid family dental, family vision, Life, STD, LTD
- Up to 10% 401K match
- 14 paid holidays
- Paid time off for birthday and floating holiday for religious purposes
- 20 paid vacation days
- 15 paid sick days

Please send a letter of interest that outlines your experience against each of the selection criteria above and resume by email to hr@mmsa.org or by regular mail to Human Resource Director, PO box 2246, Augusta, ME 04338

Materials should be submitted by **September 15th** to ensure full consideration.

Maine Mathematics and Science Alliance is an equal opportunity employer that is committed to diversity and inclusion in the workplace. We prohibit discrimination and harassment of any kind based on race, color, sex, religion, sexual orientation, national origin, disability, genetic information, pregnancy, or any other protected characteristic as outlined by federal, state, or local laws. This policy applies to all employment practices within our organization. MMSA makes hiring decisions based solely on qualifications, merit, and business needs at the time.