Designing Smartphone Microlessons to Improve the Cybersecurity Workforce

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URL: https://www.sri.com/work/projects/microlessons-build-readiness-cybersecurity-workforce

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PROJECT GOALS
• Create and test prototype microlessons
• Evaluate proof-of-concept with adult learners
• Assess user learning and satisfaction
• Develop recommendations for self-directed microlearning for cybersecurity workforce

PROBLEM: HOW TO GROW THE CYBERSECURITY WORKFORCE
• To expand the workforce and keep it current with changing cybersecurity challenges

SCIENTIFIC IMPACT: HOW TO FOSTER SELF-DIRECTED LEARNING
• Study will test proof-of-concept of using 5-minute smartphone game scenarios to motivate self-directed learning on the job

SOLUTION: SMARTPHONE MICROLESSONS – GAME-BASED SCENARIOS

BROADER IMPACT:
SOCIETY
• New tool for cybersecurity vendors, employers, and educators to engage current and future technicians
• New method for working adults to explore future careers or courses in cybersecurity

BROADER IMPACT:
EDUCATION AND OUTREACH
• Designed for busy, working adult learners
• Supports informal learning about cybersecurity
• Refreshes knowledge gained in technical courses
• Leverages experiential approach

BROADER IMPACT:
MICROLESSONS AIM TO INCREASE...
• Perceived confidence and job readiness by 50%
• Informal learning of cybersecurity by 25%
• Interest in cybersecurity careers by 10%

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