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Descrizione fisica	1 online resource (viii, 91 pages)
Collana	General Engineering and K-12 Engineering Education Collection
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Soggetti	Science - Study and teaching - United States Technology - Study and teaching - United States Engineering - Study and teaching - United States
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. The breadth of the problem -- 1.1 The face of computer science -- 1.2 How underrepresented populations are created -- 1.3 Conclusion -- 2. The depth of the problem -- 2.1 Annotated bibliography -- 3. Proposed solutions -- 3.1 Socialization at a young age -- 3.2 Socialization in college -- 3.3 Socialization in general -- 3.4 Cultivate interest -- 3.5 Work environment for women -- 3.6 Familial support -- 3.7 Financial barriers -- 3.8 Classwork and teaching methods -- 3.9 College culture and policies -- 3.10 Faculty -- 3.11 Research -- 3.12 Internships and cooperative education -- 3.13 Mentoring -- 3.14 Tutoring -- 3.15 Social opportunities -- 3.16 Outreach to K-12 teachers -- 3.17 Outreach to community colleges -- 3.18 Outreach to nontraditional students -- 3.19 STEM high schools for URPs and REMs -- 3.20 Bias -- 3.21 Dual enrollment programs -- 3.22 Further recommendations -- 3.23 Conclusion -- 4. Application -- 4.1 Proposed solutions to the problem of underrepresented populations in STEM -- 4.2 Conclusion -- References -- Index.
Sommario/riassunto	This book will examine the problem of underrepresented populations (URPs) in the so-called "STEM" fields: Science, Technology, Engineering,

and Mathematics. Who are these underrepresented populations? What creates them? And finally, why should there be concern about URPs in STEM? It will be shown that there is a crisis of a dearth of women, especially minority women, in STEM. This problem is especially acute in Computer Science. It will be shown what has combined to create the perfect storm of impending economic stagnation, impoverished populations, diminished innovation, and lack of interest in choosing these fields. Some solutions to the factors contributing to this problem will be proposed in order to correct this social injustice, and stave off losing America's status as one of the leaders in technological innovation and economic opportunity.
