Computer Science For All – The U.S. Experience

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In The Beginning

Organizations / Programs Formed:
• Computer Science Teachers Association, 2004 (Chris Stephenson)
• ACM Education Policy Committee, 2006 (Cameron Wilson, BS)
• National Science Foundation CS10K initiative, ~2010 (Jan Cuny)

At national and state levels:
• Lack of awareness of computing job demand
• Lack of inclusion of computer science in STEM legislation/policy
• Very little inclusion of computer science in K-12 (pre-university)
Transformative Steps

• Annual Computer Science Education Week created, supported by resolution of U. S. Congress (2009)


• Inclusion of Industry: Computer in the Core created ~ 2010

• Creation of “CS Principles” AP course begins, launched 2016/7
Adolescence / Scaling

- code.org launched, Hour of Code launched and integrated into Computer Science Education Week by code.org (2013)

- CS for All initiative launched by Obama administration (2016)

- CS Advanced Placement Exam Enrollments grew from 20K in 2007 to 136K in 2018

- Majority of US States have adopted standards/requirements for computer science education at K-12 (school) level
Lessons

• Major progress is possible

• Industry involvement is key (in addition to education and government sectors)

• Needs dedicated leadership effort