

**Jean Griffin**  
Curriculum Vitae  
December 30, 2012

Director of Computer Science Partnerships  
Netter Center for Community Partnerships  
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U.S. Citizen

### Education

- **Doctoral Student**  
*University of Pennsylvania Graduate School of Education, Philadelphia PA*
- **M.S.E. Computer Science, 1990**  
*University of Pennsylvania School of Engineering and Applied Sciences, Philadelphia PA*
- **B.A. Computer Science, Honors, Phi Beta Kappa, 1983**  
*Mills College, Oakland CA*

### Employment

- **Director of Computer Science Partnerships, 2011–present**  
Netter Center for Community Partnerships, Univ. of Pennsylvania, Philadelphia PA
- **Lecturer, 2002–2012**  
Department of Computer and Information Science, Univ. of Pennsylvania, Phila. PA
- **Visiting Professor, 2001-2002**  
Department of Computer Science, Swarthmore College, Swarthmore PA
- **Software Engineer, 1997–2000**  
Film East, Marlton NJ
- **System Administrator, 1996–1997**  
Swarthmore College, Swarthmore PA
- **Software Developer, 1993-1996**  
Independent Contractor, Swarthmore PA
- **Research Associate, 1988-1990**  
University of Pennsylvania Graphics Lab, Philadelphia PA
- **Instructor, 1983–1987**  
AT&T Technologies Education Center, Hopewell NJ
- **System Administrator, 1982–1983**  
Academic Computing Center, Mills College, Oakland CA

### Summer Employment

- **Director, Boot Up! Camp** (for minority public high school students), 2010-2012  
Schools of Engineering and Education, University of Pennsylvania, Philadelphia PA
- **Director, Google CS4HS Workshop** (for high school teachers), 2010-2012  
University of Pennsylvania 2010-2011; Villanova PA, 2012
- **Instructor** (of advanced high school students), 2005-2011  
Summer Academy in Applied Science & Technology, Univ. of PA, Philadelphia PA
- **Instructor** (of incoming Penn freshmen), 2003-2006  
Pre-Freshman Program, University of Pennsylvania, Philadelphia PA

## Honors, Awards, and Recognitions

- Phil Beta Kappa, Elizabeth Mudd Prize for Scholarship, Mills College, 1983

## Grants

- NSF BPC #0940511, Penn COMP-ACT: *A College Service Learning Course to Promote and Increase COMPUTational Thinking and ACTivities in Afterschool and Summer Programs*. Co-PI (one of five Penn PI/Co-PIs). \$615K over 3 years, 2010 – present.
- Lenovo Group, Ltd. (corporate sponsorship through Penn's development office). *Hop, Skip, and Jump: a Pedagogical Progression to Promote Computational Thinking from Schoolyard Games to Block-Based Programming to Text-Based Programming*. PI. 2011-2012. \$30K.
- NSF CNS #0938336, *Using Computational Thinking to Model a New Course: Advanced Placement Computer Science: Principles* (PI: Owen Astrachan; Co-PIs: Amy Briggs, Lien Diaz). Sub-contractor and Pilot II CS Principles instructor, 2011-2012, \$20K.
- Google CS4HS (Computer Science for High School), ~\$15K/year, 2010-2012.
- Swarthmore College faculty grant (motion capture for computer animation course), 2002, \$1K.

## Publications

- Griffin, J., Kaplan, E., Burke, Q. (2012, March). *Debug'ems and Other Deconstruction Kits for STEM Learning*. IEEE Integrated STEM Education Conference, Trenton NJ.
- Kafai, Y., Griffin, J., et al., (2013, March). *A Cascading Mentoring Pedagogy in a CS Service Learning Course to Broaden Participation and Perceptions*. Paper to be presented at the SIGCSE conference in Denver, CO.
- Arpaci-Dusseau, A., Bauer, M., Franke, B., Griffin, J., Morelli, R., Uche, C., Astrachan, O., et al., (2013, March). *Computer Science Principles: Analysis of a Proposed Advanced Placement Course*. Paper to be presented at the SIGCSE Technical Symposium in Denver, CO.

## Panel, Poster and Workshop Publications

- Burke, W. Q., Kafai, Y., Griffin, J., et al. (2012, March). *The Reflective Mentor*. Poster presented at the SIGCSE conference in Raleigh, NC.
- Griffin, J., Kaplan, E., Burke, W. Q & Kafai, Y. B. (2011, March). *Deconstruction Kits in Scratch: Designing Scratch Debugems for Learning Core Programming Concepts*. Poster presented at the SIGCSE conference in Dallas, TX.
- Kaplan, E., Griffin, J., Kafai, Y. B. & Burke, W. Q. (2011, March). *A Deconstruction Kit for the LilyPad Arduino: Designing Debugging Sets for Learning about Circuitry & Programming for High School Students*. Poster presented at the SIGCSE conference in Dallas, TX.
- Griffin, J., Menezes, R., Chen, L., Palsetia, D. (2010, March). *BotWorld, an "Objects-First, Algorithms Early" Java Microworld*. Workshop presented at the SIGCSE conference in Milwaukee, WI.
- Dougherty, J.P., Griffin, J., Pirmann, T., and Powell, R. *Certification and standards for computing education in Pennsylvania*. Panel presentation submitted to The Twenty-fifth Annual Consortium for Computing Science in Colleges (CCSC) Eastern Conference, Villanova University, Villanova, PA, October 30 – 31, 2009.

## Trademarks

- *Debug'em, Bits Bots Bugs, Compute to Create* (pending).

## Educational Software

- *BotWorld* (a Pacman-like microworld for learning Java), developed with F. Pereira and University of Pennsylvania students, <http://www.seas.upenn.edu/~botworld>, 2005-2011.
- *Debug'ems*, <https://sites.google.com/site/scratchdebugems/>, 2010-present.

## Course Development and Teaching

| School     | Course  | Description  | Developed | Taught                       |
|------------|---------|--|-----------|------------------------------|
| Penn       | CIS 101 | <b>Compute to Create</b><br><i>Introductory computing course for non-engineering students. A CS Principles and a service-learning course. Satisfies formal reasoning requirement. Approximately 100 youth were served in a variety of outreach activities.</i>   | Y         | Spr '12                      |
|            | CIS 110 | <b>Introduction to Computer Programming</b><br><i>Introductory computing with Java. Enrollment grew from 50 to 250+ in seven years, 2004-2011.</i>   | Y         | Fall '04-10<br>Spr '05-11    |
|            | EAS285  | <b>Teaching Computer Science Basics</b><br><i>In this service-learning course, students learned principles and practices of software engineering and education, developed educational software, and taught computing to high school youth. Prerequisite: prior programming experience. The summer courses hosted Boot Up! computing camps for Philadelphia minority high school students, sponsored by NSF BPC #0940511.</i> | Y         | Spr '08,10,11<br>Sum '10, 11 |
|            | ESE 116 | <b>C Programming in the Unix Environment</b><br><i>An introductory C language course. Prerequisite: prior programming experience. Enrollment increased by ~120% in 3 years (43 students in 2005-6, 96 students in 2008-9)</i>  | Y         | Fall '05-08<br>Spr '06-09    |
|            | CIS 399 | <b>Unix System Administration</b>  | Y         | Fall '08                     |
|            | SAAST   | <b>Summer Academy for Applied Science and Technology, Computer Science</b><br><i>SAAST is a three-week, residential, selective summer academy for high school students. Students met in the credit-bearing computer science class ~8 hours each weekday.</i>   | Y         | Sum '05-11                   |
|            | PPF     | <b>Pre-Freshman Program, Computer Science</b><br><i>PPF is a four-week residential program that provides academic support for incoming freshmen. Students engaged in the computer science class for a few hours each weekday.</i>  | Y         | Sum '03-06                   |
| Swarthmore | CS 91   | <b>3D Animation and Scientific Visualization</b>   | Y         | Spr '02                      |
|            | CS 35   | <b>Algorithms and Object Oriented Programming</b> (with Java),   | N         | Fall '01                     |
|            | CS 21   | <b>The Imperative Paradigm</b> (C and Unix)  | N         | Fall '01,<br>Spr '02         |

## Workshops

- *App Inventor for Android*, Google CS4HS, Villanova PA, August 14, 2012.
- *Scratch from Middle School to College*, Google CS4HS, Villanova PA, August 13, 2012.
- *Create Your Own Mobile Apps with App Inventor*, for Science Leadership Academy high school students, The Franklin Institute, Philadelphia PA, February-March, 2012.
- *Acting Out with Scratch, and Debug'ems*, Scratch Day at the University of Pennsylvania Graduate School of Education, Philadelphia, PA, May 19, 2012.
- *Create Your Own Game (or Mobile App)*, WICS High School Day for Girls, University of Pennsylvania, April 2010, 2011, 2012.
- *Create Your Own Game*, AWE Gears Workshop for Girls, University of Pennsylvania, Spring, 2011.
- *Scratch*, Google CS4HS, Philadelphia PA, August, 2011.
- *CS Unplugged*, Google CS4HS, Philadelphia PA, August, 2010.
- *Objected Oriented Programming with Java*, Google CS4HS, Philadelphia PA, August, 2010.
- *BotWorld, an "Objects-First, Algorithms Early" Java Microworld*, ACM SIGCSE Technical Symposium, Milwaukee WI, March, 2010.
- *Java Programming* (with Dave Matuszek), ACM JETT (Java Engagement for Teacher Training, Univ. of Pennsylvania, July 2004, 2005.

## Invited Talks and Panels

- *Block-Based Programming with Scratch and App Inventor for Android*, Princeton IEEE / ACM chapter meeting, Princeton University, Nov 15, 2012.
- *Computer Science Principles* (panel), Google CS4HS, Villanova Conference Center, August 13, 2012.
- *The Computer Science Principles Project*, Tapestry Workshop, University of Pennsylvania, July 12, 2012.
- *Debug'ems and Other Deconstruction Kits for STEM Learning*, Princeton IEEE / ACM Integrated STEM Education conference, Ewing, NJ, March 9, 2012.
- *Computer Science in High School, College, and Beyond*, National Consortium of Specialized Secondary Schools for Math, Science, and Technology Conference, Washington DC, March 12, 2009.

## Service

- Developer and instructor of Penn service learning courses, 2008-present.
- Collaborator with Penn Netter Center for Community Partnerships (Moelis Access Science) colleagues, providing STEM outreach to W. Philadelphia youth, 2011-present.
- Co-Director, *Reboot, Renew, Retreat* Workshop for high school teachers sponsored by CSTA (Computer Science Teachers Assn.), Google, etc., Villanova PA, Aug 13-15, 2012.
- Secretary, CSTA-Philly (Philadelphia Computer Science Teachers Assn.), 2012-present.
- Judge, C# programming competition, Univ. of PA Weiss Tech House, 2005.
- Faculty advisor, undergraduate senior thesis, Mary Obasi et al., 2004-5.
- Faculty advisor, Penn undergraduate Women In CS club, 2003 (inaugural year).
- President, Swarthmore Recreation Association, 2001-2002 (Board member 1999-2002).
- Coach, Swarthmore Recreation Association, 1997-2002.