**BRIEF VITA**


# DAVID LARGENT

**Ball State University**
**College of Sciences and Humanities**
**Department of Computer Science**
**Associate Lecturer of Computer Science**


## EDUCATION

| Degree | Date | University | Major |
|---|---|---|---|
| MS | May 2010 | Ball State University | Computer Science |
| BS | May 1979 | Manchester College | Social Work |
| AA | May 1979 | Manchester College | Computer Applications |

## EMPLOYMENT at BALL STATE UNIVERSITY

Promoted to Associate Lecturer on August 17, 2018.
Title administratively changed to Assistant Lecturer on January 1, 2018.

| Date: 5/18/2009 (Summer only) | 1/11/2010 (part time) | 8/20/2010 (full time) |
|---|---|---|
| Rank: Instructor | Instructor | Instructor |

## PROFESSIONAL EMPLOYMENT prior to BALL STATE UNIVERSITY

| Title | Date | Company |
|---|---|---|
| Graduate Assistant & Instructor | 2008-2010 | Ball State University |
| Information Services Manager | 1988-2007 | Townsend Tree Service Co., Inc. |
| Adjunct Faculty Member (part-time) | 1981-1997 | Ivy Tech Community College |
| Systems Analysis Supervisor | 1984-1988 | Townsend Tree Service Co., Inc. |
| Computer Programmer | 1979-1984 | Townsend Tree Service Co., Inc. |

## ACADEMIC/RESEARCH INTERESTS

- Pedagogy (flipped learning, learner-centered teaching, specifications grading)
- Computer science education
- Diversity and inclusivity in computer science
- Stages of group development

## CLASSES TAUGHT at BALL STATE

- CS 104 **Introduction to Computers** (3 credit hours) service course
- CS 110 **Introduction to Computer Science and Web Programming** (3 credit hours) service course
- CS 120 **Computer Science 1** (4 credit hours) required freshman-level course
- CS 200 **Computers and Society** (3 credit hours) UCC Tier 2 Natural/Social Science elective course
- CS 204 **Personal Computing** (1 credit hour) service course
- CS 205 **Multimedia Programming** (1 credit hour) service course
- CS 206 **Digital Imaging for the Web** (1 credit hour) service course
- CS 222 **Advanced Programming** (3 credit hours) required sophomore-level course
- CS 239 **Social and Professional Issues** (1 credit hour) required sophomore-level course
- CS 339 **Computer Science, Education, and History: The British Isles Connection** (3 credit hours) international field study course
- CS 499 **Independent Study** Individual learners (3 credit hours) independent study course
- CS 499 **Computer Science for Middle Schoolers Plus (CS4MS+)** (3 credit hours) immersive learning course
- HONR 296 **Computer Science and Algorithms to Live By** (3 credit hours) Honors College Inquiries in the Physical Sciences course
- HONR 390 **Science, Education, and Diversity (SED)** (3 credit hours) immersive learning course
- HONR 390 **2019-2054: 35 to 70 years after Orwell's Nineteen Eighty-Four. Is it inevitable?** (2 credit hours) Honors College colloquium course
- HONR 499 **Senior Honors Project** Individual learners (3 credit hours) Honors College senior project course

## PUBLISHED WORK and PRESENTATIONS

- 29 publications in book chapters, journals, and conference proceedings
- 14 magazine articles and white papers
- 35 presentations

Recent publications include:

- David L. Largent. Kicking the paint bucket down the road: Checking in with our learners. Faculty Focus: Higher Ed Teaching Strategies from Magna Publications (website). Madison, WI. Magna Publications. www.facultyfocus.com/articles/teaching-and-learning/checking-in-with-our-learners/ Accepted based on editorial review of article. (2019).

- David L. Largent. To write dirty, you have to know what clean is. In C. Sweet, H. Blythe, & R. Carpenter (Eds.), *It Works for Me with Critical Thinking: A step-by-step guide.* New Forums Press. Stillwater, OK. 70-72. ISBN: 978-1-58107-336-2. Acceptance rate: 84%. (2019)

- David L. Largent. Finding relevancy in the news. In C. Sweet, H. Blythe, & R. Carpenter (Eds.), *It Works for Me with Critical Thinking: A step-by-step guide.* New Forums Press. Stillwater, OK. 84-86. ISBN: 978-1-58107-336-2. Acceptance rate: 84%. (2019)

- David L. Largent. Forcing students to make an informed choice. In C. Sweet, H. Blythe, & R. Carpenter (Eds.), *It Works for Me with Critical Thinking: A step-by-step guide.* New Forums Press. Stillwater, OK. 99-101. ISBN: 978-1-58107-336-2. Acceptance rate: 84%. (2019)

- James W. McGuffee, David L. Largent, and Christian Roberson. Transform Your Computer Science Course with Specifications Grading. In *Proceedings of the 50th ACM Technical Symposium on Computer Science Education (SIGCSE '19)*. ACM, New York, NY, USA, 1234-1234. DOI: doi.org/10.1145/3287324.3287528 Equal effort from all authors. Peer reviewed. Acceptance rate: 53%. (2019)

- David L. Largent. Using an Art Show in CS1 to Spark Interest in Computer Science. In Pr*oceedings of the 50th ACM Technical Symposium on Computer Science Education (SIGCSE '19)*. ACM, New York, NY, USA, 1281-1281. DOI: doi.org/10.1145/3287324.3293861 Peer reviewed. Acceptance rate: 63%. (2019)

- Petra Zimmermann, Lynne Stallings, Rebecca Pierce, and David Largent. Classroom Interaction Redefined: Multidisciplinary Perspectives on Moving Beyond Traditional Classroom Spaces to Promote Student Engagement. In *Journal of Learning Spaces, 7(1)*. ISSN 21586195. University of North Carolina at Greensboro, Greensboro NC. libjournal.uncg.edu/jls/article/view/1601. Equal effort from all authors. (2018)

- Jeff Kinne and David L. Largent. The status of CS education in Indiana: work in progress. Abstract in *The Journal of Computing Sciences in Colleges, papers of the CCSC: Midwest 2018 conference* (CCSC:MW 2018). (Muncie, IN, September 28-29) Consortium for Computing Sciences in Colleges, Monroe. LA, USA, 123dl.acm.org/citation.cfm?id=3280508. 60% Kinne / 40% Largent. Peer reviewed. (2018)

- Paul Gestwicki and David L. Largent. Improving course plans via standardized committee review. In C. Sweet, H. Blythe, & R. Carpenter (Eds.), *It Works for Me with High Impact Practices: A step-by-step guide.* New Forums Press. Stillwater, OK. 13-14. ISBN: 978-1-58107-320-1. Equal effort from both authors. Peer reviewed. Acceptance rate: 70%. (2018)

- David L. Largent. Team work does not have to be a bad thing. In C. Sweet, H. Blythe, & R. Carpenter (Eds.), *It Works for Me with High Impact Practices: A step-by-step guide.* New Forums Press. Stillwater, OK. 63-65. ISBN: 978-1-58107-320-1. Peer reviewed. Acceptance rate: 70%. (2018)

- David L. Largent. Highlight your student's work: Art show (but not by artists)! In C. Sweet, H. Blythe, & R. Carpenter (Eds.), *It Works for Me with High Impact Practices: A step-by-step guide.* New Forums Press. Stillwater, OK. 132-134. ISBN: 978-1-58107-320-1. Peer reviewed. Acceptance rate: 70%. (2018)

- David L. Largent. My exploration of specifications grading in a discussion-based course. Abstract in *The Journal of Computing Sciences in Colleges, papers of the CCSC: Midwest 2017 conference* (CCSC:MW 2017). (Grand Rapids, MI, September 22-23) Consortium for Computing Sciences in Colleges, Monroe. LA, USA, 89. Peer reviewed. (2017)

- David L. Largent. Try out your new pedagogy. Find out it works. Share it with the world. Hold on! Not so fast…. In H. Blythe, C. Sweet, & R. Carpenter (Eds.), *It Works For Me with SoTL: A step-by-step guide.* New Forums Press. Stillwater, OK. 58-60. Peer reviewed. ISBN: 978-1-58107-307-2. Acceptance rate: 50%. (2017)

- Scott S. Hall, David L. Largent, and Mary Lou Vercellotti. Building Institutional Support for SoTL In H. Blythe, C. Sweet, & R. Carpenter (Eds.), *It Works For Me with SoTL: A step-by-step guide.* New Forums Press. Stillwater, OK. 56-58. Peer reviewed. ISBN: 978-1-58107-307-2. Acceptance rate: 50%. (2017)

- David L. Largent. A case study in Computer Science. In L. Santos Green, J. R. Banas, & R. Perkins (Eds.), *The flipped college classroom: Conceptualized and re-conceptualized*. Springer. New York, NY, 163-167. Peer reviewed. ISBN: 978-3-319-41853-7. Acceptance rate: 24%. (2017)

- David L. Largent. Helping students identify a healthy learning environment. In H. Blythe, C. Sweet, & R. Carpenter (Eds.), *It Works For Me, Metacognitively: Shared Tips for Effective Teaching.* New Forums Press. Stillwater, OK, 97-98. Peer reviewed. ISBN: 978-1-58107-293-8. Acceptance rate: 45%. (2016)

- David L. Largent. Asking novice computer programmers to reflect on their experience writing code. In H. Blythe, C. Sweet, & R. Carpenter (Eds.), *It Works For Me, Metacognitively: Shared Tips for Effective Teaching.* New Forums Press. Stillwater, OK, 131-132. Peer reviewed. ISBN: 978-1-58107-293-8. Acceptance rate: 45%. (2016)

- David L. Largent. Measuring and understanding team development by capturing self-assessed enthusiasm and skill levels. In *ACM Transactions on Computing Education, 16(2), article 6*. ACM, New York, NY, USA, 27 pages. Peer reviewed. dx.doi.org/10.1145/2791394. Acceptance rate: 27.5%. (2016)

Recent presentations include:

- David L. Largent. Holding Students Responsible With Specifications Grading. Lilly International Conference on College Teaching. Miami University, Oxford, Ohio, November 21-23, 2019. Accepted based on blind peer review of an extended abstract.

- David L. Largent. Holding Students Responsible With Specifications Grading: An Implementation Workshop. Lilly International Conference on College Teaching. Miami University, Oxford, Ohio, November 21-23, 2019. Accepted based on blind peer review of an extended abstract.

- Lilly International Conference on College Teaching. Miami University, Oxford, Ohio, November 15-18, 2018. Another year of giving students choice, and then holding them responsible: Combining specifications grading with learner-centered teaching. Presentation accepted based on review of extended abstract.

- Innovative Educator Conference, Muncie, Indiana, June 20, 2018. Computer Science Unplugged K-8. Co-presented with Monica Appel. Invited presentation.

- Innovative Educator Conference, Muncie, Indiana, June 20, 2018. Computer Science Panel. Paul Buis, moderator; David Largent and Susie Cunningham, panelists. Invited presentation.

- Lilly International Conference on College Teaching. Miami University, Oxford, Ohio, November 16-19, 2017. Giving Students Choice, and Then Holding Them Responsible: Combining Learner-Centered Teaching and Specification Grading. Presentation accepted based on review of extended abstract.

- Lilly International Conference on College Teaching. Miami University, Oxford, Ohio, November 17-20, 2016. Increasing awareness of diversity and inclusivity issues in computer science (and other) courses. Presentation accepted based on review of extended abstract.

- Diversity Research Symposium. Indiana University Southeast, New Albany, Indiana, October 21-22, 2016. Towards changing the climate: How I got Computer Science majors to embrace diversity and inclusivity (It could work for your discipline too!). Presentation accepted based on review of abstract.

- Edward C. Moore Symposium on Excellence in Teaching. IUPUI, Indianapolis, Indiana, March 25, 2016. Towards building community by embracing diversity (in Computer Science and all disciplines). Poster accepted based on review of abstract.

- Diversity Research Symposium. Indiana State University, Terre Haute, Indiana, October 23-24, 2015. Towards building community in Computer Science (and other disciplines) by embracing diversity. Presentation accepted based on review of abstract.

- Consortium of Computing Sciences in Colleges: Midwest (CCSC:MW) 2015. University of Evansville, Evansville, Indiana, October 2-3, 2015. Increasing diversity in computer science. Presentation accepted based on review of abstract.

## ACTIVITY HIGHLIGHTS

- Fall 2019: Developed and taught a **new Honors College Inquires in the Physical Sciences course** (HONR 296) titled "Computer Science and Algorithms to Live By". This course is a broad survey of computer science including its history, applications, programming languages, and computer architecture. A special emphasis is placed on algorithms and the relationships of computer science to human concerns and society, including the social and ethical consequences raised by the application of technology in contemporary society. Spring 2019-Present.

- Spring 2019: Participated as a Faculty Fellow in the Ball State Career Center **Skills Infusion Program**. We explored how to augment our courses and syllabi by mapping course outcomes to the National Association of Colleges and Employer's (NACE) transferable skills.

- Fall 2018: Developed and taught a **new Honors College colloquium course** (HONR 390) titled "2019-2054: 35 to 70 years after Orwell's Nineteen Eighty-Four. Is it inevitable?" This course explored current and future technology trends, and our interaction with them. The emphasis was on discussion, reflection, individual projects, and ways of combining information from several sources. The course used two primary sources to guide discussions: George Orwell's *Nineteen Eighty-Four*, and Kevin Kelly's *The Inevitable: Understanding the 12 technological forces that will shape our future*. Orwell set his story 35 years into his future. Kelly makes predictions about 12 technological forces that he believes will inevitably determine our future 30 years from now.

- Fall 2018, fall 2017, and fall 2019: *Computer Science for Middle Schoolers (CS4MS)*. PI: David Largent. BSU Provost **Immersive Learning** Grant, Total: $10,979 (2019), $10,696 (2018) and $9,960.50 (2017). Identification and development of Computer Science (CS) and Computational Thinking (CT) modules. A team of students researched our partners' needs, evaluated existing and developed new pedagogy and content, worksheets, activities and resources, developed a resource website, and delivered curated resources to our partners. One particular focus of the project was to expose underrepresented minorities and females to CS and CT.

- Spring 2017-Present: Implemented **specifications grading** in CS 200 starting spring 2017, CS 222 and CS 239 starting fall 2017, and all courses since spring 2018. Specifications grading can make grading faster, clearer, and more precise, allowing the instructor to focus more on promoting improvement in students rather than worrying about justifying a grade. I created and shared with the students a clearly stated specification of what I expected for each assignment. My evaluation of student work then generally determined that they either met, or not met, the specifications, rather than assigning points or a letter grade for the assignments.

- Summer 2016-Spring 2017: Selected and participated in the BSU **Entrepreneurial Learning Academy** (ELA). I met with other ELA participants during the summer to explore the entrepreneurial learning mindset, create active learning outcomes for students, and apply this work to our course syllabi. During fall 2016 and spring 2017 semesters, I taught from my new syllabus. The ELA participants also meet regularly during the academic year as the Faculty Entrepreneurial Learning Community.

- Spring 2016: Selected and participated in the BSU **Faculty Academy for Contract Faculty**. Topics included academic ethics and grade appeals, teaching to promote entrepreneurial learning, assessment, technology in teaching, "new" pedagogy, and balancing work and home life, etc.

- Summer-fall 2016: *Developing SED (Science, Education, and Diversity) Modules*. PI: Lynne Stallings, Co-PI: David Largent, and Carolyn Dowling. (Equal effort by all three investigators.) BSU Provost **Immersive Learning** Grant, Total: $20,600. Development of STEM modules. An interdisciplinary team of BSU students researched the specific needs of the partner, evaluated existing and developed

new pedagogy and content, and delivered the completed program to the partner. The focus of the program was to expose underrepresented minorities and females to STEM.

- Spring 2014-Present: Introduced a significant **diversity and inclusivity** component into CS 239.

- Fall 2014-spring 2015: Appointed to serve as a **Diversity Associate**. Participated in a year-long relationship with Dr. David Concepción. Developed inclusive pedagogy. Focused on increasing diversity and decreasing disparities in expectations in computer science courses.

- Fall 2014-Present: Introduced the use of **reflection papers** in CS 120 (due with each project) to cause the students to reflect on their experience developing a solution to the project. In 2015-2016, I extended the reflection paper requirement to also include a response to a prompt based on portions of the **freshman common reader**. These reflections were related to the student's experiences in class and how they related to passages from the book.

- Fall 2014-Present: Started implementing **learner-centered teaching pedagogy** in my classes. Example activities include course policy negotiation, establishment of what a good learning environment is, and a midterm survey about the learning environment of the class.

- Fall 2013-Present: Organized and promoted an all-section **CS 120 "Art Show"** where the best student-created photo collages (a project in the class) are selected from each section and exhibited each semester. This raises visibility of the department within the university, provides a venue in which students can showcase their work to their peers and others, and motivates students to be creative and engaged. I gained support from the department and other course instructors, and coordinated our collective efforts. Each semester I create a supporting show handout, an entrant web page, a web page documenting the winners, and recruit judges from across the campus. I continue to organize and promote this event, which has become a tradition each semester. Show website: www.cs.bsu.edu/homepages/dllargent/CS120ArtShow.html.

- Fall 2012-Present: Implemented a blended pedagogical model in CS 110 and CS 120 by utilizing **flipped learning**. In this context, flipping means that the lecturing was primarily done outside the classroom—via links to videos (I self-recorded and edited more than 100 videos, totaling more than 17 hours) provided in Blackboard or Canvas—and the homework and project work—the activities when most of the students' questions usually arise—were mostly done in the classroom. This hybrid model permitted the classroom focus to be on the students' questions, both by the instructor, and via peer instruction in small groups while they worked on topical reinforcing activities in pairs and small groups.

- Summer 2012-Present: Participated in the Office of Educational Excellence's **Interactive Learning Space Initiative** which has the purpose of strengthening learning though pedagogy, learning space design, and technology. In this environment, the course focus moved from content to application, and supported the implementation of engaged learning methodologies such as Inquiry Based Learning, Team Based Learning, and Problem Based Learning.

- Summer 2011-summer 2012: Envisioned, developed, and established a new **international field study course** with the approval and support of the department, college, and the Rinker Center for International Programs. The course, entitled ***Computer Science, Education, and History: The British Isles Connection*** was taught during May 2012. This course was designed to provide students with opportunities to gain an appreciation for, and understanding of, computer science history, and to experience the nature of higher education in England, Ireland, Northern Ireland, and Scotland. Additionally, students were provided opportunities to expand their world view by being immersed in the cultures of these countries. A large variety of museums and historical venues provided insight into the history of computer science and the role the British Isles played in this history. Many universities were visited where course participants had direct, in-person, interaction with students, faculty and

professionals from the area. During this interaction students were encouraged to explore similarities and differences in the nature of higher education, the work environment, and local culture. Students experienced international travel, and the culture of the visited areas.

- Fall 2010-Present: Started using the **iClicker response system** in both Fall 2010 sections of CS 104. Since then, I have used them in all sections of CS 104, CS 110, CS 116, CS 120, CS 200, and CS 239. I was the first in the department to adopt this technology.

## SERVICE

- December 2019-Present: **Computer Science for Middle Schoolers Plus (CS4MS+)** student organization. Faculty advisor.
- August 2019-Present: **IndianaComputes**. Executive Committee member.
- September 2018-Present: BSU College of Sciences and Humanities **Teacher Education Committee**. Member.
- September 2018-April 2019: BSU College of Sciences and Humanities **Innovative Teaching Task Force**. Member.
- September-November 2018: BSU Computer Science Department ad hoc **Office Hour Policy Development Committee**. Member.
- April 2018-Present: **Indiana Computer Science Higher Education Advisory Board** for K-12 Computer Science. Member.
- January-June 2018: **Innovative Educator Conference**. Member of planning committee.
- Fall 2017-Present: BSU **Academic Technology Committee of Faculty Council**. Member.
- Summer 2017-Summer 2019: BSU **Medallion Scholar Faculty Review Committee**. Member.
- Fall 2017-Present: Serving as the "point person" for **development of the BSU Computer Science Teacher Education Major**. Appointed by the CS department chair. Working with the CS Chair, other CS faculty, and individuals from the Dean's offices of the College of Sciences and Humanities, and the Teachers College.
- Summer 2017-Present: Serving as a **faculty marshal** for both university and college commencement ceremonies.
- Summer-Fall 2017: BSU Computer Science Department ad hoc **Contract Faculty Committee**. Served as chair.
- Fall 2016-Fall 2017: **Diversity Research Symposium** (DRS). Member of planning committee.
- Fall 2015-Present: Computer Science **Department Foundations Curriculum Committee**. Member. Served as Secretary since August 2015.
- Spring 2015-present: **Faculty mentor of Honors Thesis** for three students.

- Fall 2014-Fall 2016: **American Cancer Society, Colleges Against Cancer**, BSU chapter. Faculty advisor. Major event was Relay for Life.

- Spring 2012-present: **East Central Indiana Regional Science Fair**. Judge.

- Fall 2010-spring 2015: Computer Science **Department Service Curriculum Committee**. Member. Served as Secretary since January 2012.

- Summer 2010-Present: **Golden Key International Honour Society (GKIHS)**, BSU chapter. Faculty advisor.

- Fall 2010-Present: **Consortium for Computing Science in Colleges: Midwest (CCSC:MW) conference**. Member of planning committee. Chair, vice chair, site chair, chair for publicity, and co-chair for the student showcase.

## RECOGNITIONS

- September 2017: Association for Computing Machinery (ACM). Recognized as a Senior Member. awards.acm.org/senior-members

- July 2017: Measuring and understanding team development by capturing self-assessed enthusiasm and skill levels. *ACM Transactions on Computing Education* **16**, 2 (Mar. 2016), Article No. 6 was included on the ACM Computing Reviews 21st Annual Best of Computing: Notable Books and Articles list. www.computingreviews.com/recommend/bestof/notableitems.cfm?bestYear=2016.

- April 2017: National Residence Hall Honorary, Ruth Peters (BSU) Chapter. Independently nominated by two students for my "dedication to academic excellence and student success."

## CERTIFICATIONS

- Flipped Learning Global Initiative (FLGI). International.
  www.credential.net/profile/davidlargent/wallet
  a. 2018-2019: Flipped Learning 3.0 Level-II Certification.
  b. 2017-2018: Flipped Learning Trainer Certification Level-I.
  c. 2017-2019: Flipped Learning Level-I Certification.

- Collaborative Institutional Training Initiative (CITI)
  a. 2018-Present: Responsible Conduct of Research for Engineers/Technology Sciences. Expires: N/A. International.
  b. 2010-Present: Social & Behavioral Research - Basic/refresher curriculum. Expired 09/05/2019. (currently renewing) International.

## PROFESSIONAL MEMBERSHIPS

- 2014-present: Computer Science Teachers Association (CSTA)
- 2010-present: Consortium for Computing Sciences in Colleges (CCSC)
- 2009-present: IEEE Computer Society
- 2008-present: Association of Computing Machinery (ACM)
- 1980-2007: Indiana Regional Users Group for Hewlett-Packard Computer Users (INRUG)
- 1983-2005: International Association of Hewlett-Packard Computing Professionals (Interex)