The faculty member is encouraged to use a range of evidence demonstrating instructional accomplishment, which can be included in portfolios or compendia of relevant materials.

1. **Undergraduate and Graduate Credit Instruction:**
Record of instructional activities for at least the past six semesters. Include only actual participation in credit courses (on- or off-campus instruction) or virtual university on-line courses. In determining the “past six semesters,” the faculty member may elect to exclude any semesters during which s/he was on leave; additional semesters may be included on an additional page. Fill in or, as appropriate, attach relevant print screens from CLIFMS*.

<table>
<thead>
<tr>
<th>Semester and Year</th>
<th>Course Number</th>
<th>Credits (Number or Var)</th>
<th>Number of Sections Taught</th>
<th>Number of Students</th>
<th>Number of Assistants **</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Fall 2015</td>
<td>CMP 328</td>
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<td>Lec 1 + Lab 2</td>
<td>49</td>
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<td>90% redeveloped by [redacted]</td>
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<td></td>
<td>PDC 491</td>
<td>2</td>
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<td>Fall 2016</td>
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<td>Lec 1 + Lab 3</td>
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<tr>
<td></td>
<td>CMP 899</td>
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<tr>
<td></td>
<td>PDC 999</td>
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<td>CMP 899</td>
<td>3</td>
<td>Lab 1</td>
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<td></td>
<td>PDC 490</td>
<td>3</td>
<td>Lab 1</td>
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<tr>
<td></td>
<td>PDC 999</td>
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<td>Lab 1</td>
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<tr>
<td>Fall 2017</td>
<td>CMP 328(^*)</td>
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<td>CMP 828(^*)</td>
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<td></td>
<td>PDC 999</td>
<td>9</td>
<td>Lab 1</td>
<td>1</td>
<td>0</td>
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</tr>
</tbody>
</table>

*On a FMLA leave approved by the university with reduced course teaching.

2. **Non-Credit Instruction:**
List other instructional activities including non-credit courses/certificate programs, licensure programs, conferences, seminars, workshops, etc. Include non-credit instruction that involves international, comparative, or global content delivered either to domestic or international groups, either here or abroad.
Seminar on construction management to BOSCH North American headquarter management with Dr. [redacted] 2017.

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*Consult departmental staff who are authorized to enter data on the web-based CLIFMS (Course Load, Instruction, Funding and Modeling System) system and can search for course sections and enrollments by faculty name, per semester.

**May include graduate and undergraduate assistants, graders, and other support personnel.
FORM D – IV A INSTRUCTION, continued

3. Academic Advising:

a. Faculty member’s activity in the area of academic advising. The statement may include commentary on supplementary materials such as recruitment activities, international student advising, evidence of peer recognition, and evidence of student recognition.

Undergraduate: SPDC has professional advisors to manage undergraduates. I have been involved in advising two undergraduates through research in building information modeling and virtual reality modeling. The undergraduates worked with my research team on a project. Specifically, one helped create 3D building models and the other helped data collection and literature collection.

Graduate: In the past two years after joining MSU, I have graduated two Master’s students as chair and four other Master’s students as a committee member. My advising activities including guiding research, career path, internship, publication, and life. The advisee [REDACTED] received DAAD RISE scholarship funded by the German Federal Foreign Office in 2016 to support his study and work in Germany. Currently, I am advising one doctoral student as co-chair and four other doctoral students as committee member. My activities focus on advising research methodology in construction technology and building energy and professional development. The advisee [REDACTED] received the Environmental Science and Policy Program (ESPP) fellowship in 2017 to support her research. She has co-authored one journal paper and two conference papers with me with three more under review.

Graduate/Professional: N/A.

Other: N/A

b. Candidate’s undergraduate advisees (if applicable to individual under review):

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Sophomore</th>
<th>Junior</th>
<th>Senior</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

c. Candidate’s graduate/graduate-professional advisees (limit to principal advisor or committee chairpersonship status):

<table>
<thead>
<tr>
<th>Masters</th>
<th>Doctoral</th>
<th>Professional</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of students currently enrolled or active</th>
<th>Masters</th>
<th>Doctoral</th>
<th>Professional</th>
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</thead>
<tbody>
<tr>
<td>Number of graduate committees during the reporting period</td>
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</tr>
<tr>
<td>Degrees awarded during the reporting period</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Degrees awarded during career</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
4. **List of Instructional Works:**
List publications, presentations, papers, grants received (refer to Form D-IVE), and other works that are primarily in support of or emanating from instructional activity.

**Publications:**
- (2013). Building Information Modeling-enhanced Team-based Learning in Construction Education. Proc., 12th International Conf. on Information Technology Based Higher Education and Training, Antalya, Turkey

**Workshop/Conference:**
- The Michael Homan Symposium on Sustainability, as faculty advisor, 2016
- High School Engineering Institute at MSU, as faculty advisor, 2017

**Grant:**

5. **Other Evidence of Instructional Activity:**
Cite other evidence of instructional productivity such as works/grants in progress or under review (refer to Form D-IVE). Address instructional goals and approaches; innovative methods or curricular development; significant effects of instruction; and curatorial and patient care activities, etc. Include evidence of instructional awards and peer recognition (within and outside the university).

I have developed a new course CMP828 “Advanced virtual design and construction (VDC)” and have redeveloped CMP328 “Construction presentation graphics & BIM”. BIM-based VDC is a game-changing technology for the civil and construction industry, and VDC provides an ideal educational platform to analyze energy efficiency. For the course development, I have integrated two of my previously developed modules: the multidisciplinary team-based learning (TBL) module and the BIM-based collective learning module. I have also developed 90 page tutorials for the course and the work has been favored by publisher Taylor–Francis to publish as a textbook. My educational research found that a BIM-based group learning environment enables students to develop collaborative skills that are vital for their career. Using multivariate regression, I have identified a significant difference in learning outcomes owing to peer effects and proposed a peer learning and review (PLR) setting. As a result, I have developed an augmented-reality (AR) APP for my BIM class. Using pre-and-post analysis, improved learning outcomes and learning enthusiasm is identified.

I submitted my NSF CAREER proposal, in which I propose a triple-loop learning-based course development model. The model has two key features: (1) educational outcomes feed into my research (e.g., by helping debug the behavior detection model); and (2) it is transformative to other team projects or courses. I will work with MSU CREATE for STEM Institute to develop and disseminate the module while advancing my scholarship of teaching and learning.

In another NSF grant, I propose a novel global competence assessment tool which can be used to guide and evaluate study abroad program.
1. **List of Research/Creative Works:**
   Attach a separate list of publications, presentations, papers, and other works that are primarily in support of or emanating from Research and Creative Activities. Indicate how the primary or lead author of a multi-authored work can be identified. The list should provide dates and, in particular, accurately indicate activity from the reporting period. Items to be identified:
   1) Books
   2) Book chapters
   3) Bulletins or monographs
   4) Articles
   5) Reviews
   6) Papers and presentations for learned professional organizations and societies
   7) Artistic and creative endeavors (exhibits, showings, scores, performances, recordings, etc.)
   8) Reports or studies
   Indicate peer-reviewed or refereed items with a “*:”
   Indicate items with a significant outreach component with a “**:*” (determined by the faculty member)

2. **Quantity of Research/Creative Works Produced:**
   For each of the categories listed in question one above, list the number of research and creative works produced.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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</thead>
<tbody>
<tr>
<td>During the reporting period</td>
<td>1</td>
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<td>0</td>
<td>18</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>During career</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>27</td>
<td>0</td>
<td>25</td>
<td>0</td>
<td>8</td>
</tr>
</tbody>
</table>

3. **Number of Grants Received** (primarily in support of research and creative activities; refer to Form D-IVE):
   During the reporting period: 10  During career: 12

4. **Other Evidence of Research/Creative Activity:**
   Cite other evidence of research and creative productivity such as: seminars, colloquia, invited papers; works/grants in progress or under review (refer to Form D-IVE); patents; formation of research-related partnerships with organizations, industries, or communities; curatorial and patient care activities, etc. Include evidence of peer recognition (within and outside the university).

   I was honored with the Best Paper Award by the American Society of Civil Engineers (ASCE) for my article about housing resilience and sustainability published in the Journal of Architectural Engineering. This award is given to authors of an outstanding paper that was published in the Journal during the previous year. The ASCE is known to produce some of the top research journals in the world. The ASCE accepts nominations for 85 Society Awards with the objective of giving recognition to engineers who excel in their profession through achievement and or published papers. Only one Best Paper Award is given out per year, which makes this achievement even more remarkable. To be eligible to receive this award, my work was first nominated by peers, and then selected by the Editorial Team.

   My research has been reported by multiple media including Science Daily and Fox News.
FORM D - IV B  RESEARCH AND CREATIVE ACTIVITIES

1) Books
   - During reporting period

2) Book chapters
   - Before reporting period

3) Bulletins or monographs
   None.

4) Articles (*=peer-reviewed)
   - During reporting period
     * [Redacted] (2017). “Cost Prediction Model for Building Deconstruction in Urban Areas.” *Journal of Cleaner Production*. Accepted. Impact Factor: 5.8; ranking 14/425 in Industrial Engineering
FORM D - IV B  RESEARCH AND CREATIVE ACTIVITIES

  - Before reporting period

5) Reviews
None.

6) Papers and presentations for learned professional organizations and societies
(*=peer-reviewed)
  - During reporting period.
FORM D - IV B  RESEARCH AND CREATIVE ACTIVITIES


**Before reporting period**


- “The Game Changer: BIM’s Worldwide Implementation.” Presented at Chongqing University, Faculty of Built Environment, Chongqing, China, 2015, with [Redacted].

- “Toward the Future of Housing: Leveraging Technology and Efficiency.” Co-presented with [Redacted] at Chongqing University, Faculty of Built Environment, Chongqing, China, 2015.

- “Uncertainty Management and Risk Mitigation in Building Design and Construction.” Presented at the Southwest Jiao Tong University, School of Economics & Management, Chengdu, China, 2015.
FORM D - IV B  RESEARCH AND CREATIVE ACTIVITIES


7) Artistic and creative endeavors (exhibits, showings, scores, performances, recordings, etc.)
   None.

8) Reports or studies
   - During reporting period
   - Before reporting period
FORM D - IV C  SERVICE WITHIN THE ACADEMIC AND BROADER COMMUNITY

1. Service within the Academic Community

   a. Service to Scholarly and Professional Organizations:
      List significant committee/administrative responsibilities in support of scholarly and professional organizations (at the local, state, national, and international levels) including: elected and appointed offices held; committee memberships and memberships on review or accreditation teams; reports written and submitted; grants received in support of the organization (refer to Form D-IVE); editorial positions, review boards and ad hoc review requests; and programs and conferences planned and coordinated, coordinated or served on a panel or chaired a session. Include evidence of contributions (e.g., evaluations by affected groups or peers).

      - Committee member
        • Proposal Reviewer, Environmental Protection Department, Hong Kong, 2017-
        • Review Panel member, National Science Foundation (NSF), 2016-
        • Academic committee member, Construction Industry Institute (CII), 2015-
        • Scientific committee member, ASCE CRC, 2018
        • Scientific committee member, CIB W78, CONVR, IGLC, 2017
        • Scientific committee member, ASCE IWCCE, 2017
        • Scientific committee member, ASCE ICSDEC, 2016
        • Scientific committee member, IEEE IEEEM, 2015
        • Organizing committee member, CIB W78, 2010

      - Journal reviewer
        • Accident Analysis and Prevention – Elsevier
        • Automation in Construction – Elsevier
        • Canadian Journal of Civil Engineering – NRC
        • Construction Management and Economics – Taylor & Francis
        • Energy and Buildings – Elsevier
        • Engineering, Construction and Architectural Management – Emerald
        • International Journal of Construction Education and Research – Taylor & Francis
        • International Journal of Construction Management – Taylor & Francis
        • International Journal of Injury Control and Safety Promotion – Taylor & Francis
        • Journal of Architectural Engineering – ASCE
        • Journal of Civil Engineering and Management – Taylor & Francis
        • Journal of Cleaner Production – Elsevier
        • Journal of Construction Engineering and Management – ASCE
        • Journal of Management in Engineering – ASCE
        • Journal of Habitat International – Elsevier
        • Journal of Professional Issues in Engineering Education and Practice – ASCE
        • Safety Science – Elsevier
        • Sustainability – MDPI
        • Renewable & Sustainable Energy Reviews – Elsevier

      - Conference reviewer
        • CIB W78, CONVR, IGLC, 2017
        • ASCE Construction Research Congress (CRC), 2016, 2018
        • ASCE International Workshop on Computing in Civil Engineering (IWCCE), 2017
        • ASCE International Conf. on Sustainable Design, Engr. and Constr. (ICSDEC), 2016
        • ASCE International Structural Engineering and Construction Conf. (ISEC), 2017
        • ASEE Annual Conference, 2016
        • ASC Annual Conference, 2015
b. **Service within the University:**
List significant committee/administrative responsibilities and contributions within the University. Include service that advances the University’s equal opportunity/affirmative action commitment. Committee service includes: appointed and elected university, college, and department ad hoc or standing committees, grievance panels, councils, task forces, boards, or graduate committees. Administrative responsibilities include: the direction/coordination of programs or offices; admissions; participation in special studies or projects; collection development, care and use; grants received in support of the institution (refer to Form D-IVC), etc. Describe roles in any major reports issued, policy changes recommended and implemented, and administrative units restructured. Include evidence of contributions (e.g., evaluations by peers and affected groups).

- Great Lakes Builders Show Exhibit and Job Fair, Novi MI, 2017
- Academic Advisor Search Committee, SPDC, 2016
- ACCE Accreditation Annual Meeting, ACCE, 2016
- Great Lakes Builders Show Career Fair, Novi MI, 2016
- Student Contractor Awareness Night (SCAN), AGC of Michigan, 2015
2. **Service within the Broader Community:**

As a representative of the University, list significant contributions to local, national, or international communities that have not been listed elsewhere. This can include (but is not restricted to) outreach, MSU Extension, Professional and Clinical Programs, International Studies and Programs, and Urban Affairs Programs. Appropriate contributions or activities may include technical assistance, consulting arrangements, and information sharing; targeted publications and presentations; assistance with building of external capacity or assessment; cultural and civic programs; and efforts to build international competence (e.g., acquisition of language skills). Describe affected groups and evidence of contributions (e.g., evaluations by affected groups; development of innovative approaches, strategies, technologies, systems of delivery; patient care; awards). List evidence, such as grants (refer to Form D-IVE), of activity that is primarily in support of or emanating from service within the broader community.

N/A.
FORM D - IV D  ADDITIONAL REPORTING

1. **Evidence of Other Scholarship:**
   Cite evidence of “other” scholarship as specified on p. 2 in the “summary rating” table (i.e., functions outside of instruction, research and creative activity, and service within the academic and broader community). Address the scholarship, significance, impact, and attention to context of these accomplishments.
   
   All related accomplishments are covered in this form.

2. **Integration across Multiple Mission Functions:**
   Discuss ways that your work demonstrates the integration of scholarship across the mission functions of the university—instruction, research and creative activities, and service within the academic and broader community.
   
   As stated in my CAREER proposal, my research aims advance knowledge of human-building interactions and integrate the research activities and outcomes into my teaching using triple-loop learning process. Expected outcomes will be widely disseminated to a diverse audience at state, national, and international levels. The successful integration will accomplish the following: (1) engage a diverse group of students and teachers from Tribal Colleges, URM groups, and K–12 schools; (2) develop curriculum modules that incorporate research results into the triple-loop learning process to train undergraduate and graduate students in STEM fields; (3) deliver a smartphone APP for students, industry professionals, and the public to easily understand human-centered building retrofits developed by the research; and (4) promote local economic development through training skilled green engineering workforce.

3. **Other Awards/Evidence:**
   Cite other distinctive awards, accomplishments of sabbatical or other leaves, professional development activities, and any other evidence not covered in the preceding pages. (If the reporting period differs from the usual review period, then justify and support that period here.)
   
   Professional development activities:
   - *Anatomy of a Compelling NSF Grant Workshops*, by Dr. [Name], hosted by MSU OVPGRS, 10/6, 10/27, 11/10, 12/1, 2016.
   - *Iceman’s Run: NIH Grant Writing Workshop Series*, by Dr. [Name], hosted by MSU OVPGRS, 09/22, 10/6, 10/10-14, 10/20, 10/27, 11/3, 11/14-18, 11/17, 11/21, 12/1, 2016.
   - *Syllabus Design and Regulations to Protect Student Information Workshops*, hosted by MSU OVPGRS, 12/2, 2016.
   - *NIH Funding for Non-Medical Research Workshop*, by Dr. [Name], hosted by MSU’s VPRGS, East Lansing, MI, March 17, 2016.
   - *Survive and Thrive in the MSU Tenure System Workshop*, by Drs. [Names], hosted by MSU’s VPRGS, East Lansing, MI, February 24, 2016.
   - *Lessons Learned in Winning NIH Grants – NIH Panel Discussion*, by Dr. [Name], hosted by MSU’s VPRGS, East Lansing, MI, February 11, 2016.
FORM D - IV D  ADDITIONAL REPORTING

- **CRISP Proposal Writing Webinar**, by [Name], NSF officer, Washington DC, January 29, 2016
- **Write Winning Grant Proposals Workshop**, by [Name], hosted by MSU’s Office of the Vice-President for Research and Graduate Studies, East Lansing, MI, January 7, 2016.
- **Budget-Building for Grant Proposals Workshop**, by [Name], hosted by MSU’s Office of the Vice-President for Research and Graduate Studies, East Lansing, MI, November 19, 2015.
- **Internal and Foundation Grants**, by [Name], hosted by MSU’s Office of the Vice-President for Research and Graduate Studies, East Lansing, MI, October 8, 2015
- **NIH Grant Writing Training and Support**, by Dr. [Name], hosted by MSU’s Office of the Vice-President for Research and Graduate Studies, East Lansing, MI, October 6, 2015.
- **Building Bridges with Industry: Diversification of the Research Portfolio**, by Dr. [Name], hosted Virginia Tech’s Office of the Vice President for Research, May 08, 2015.
- **Finding Funding Workshop**, by [Name], hosted by Virginia Tech’s Office of the Vice President for Research, May 04, 2015.
- **Successful Grant Writing Workshop**, by [Name], hosted by Virginia Tech’s Office of the Vice President for Research, April 17, 2015

- **Data Visualization Workshop: Presenting Data Effectively**, by Dr. [Name], hosted by Virginia Tech’s Office of Assessment & Evaluation, March 20, 2015.
- **Entering Mentoring Workshop**, by Dr. [Name], hosted by Virginia Tech’s Division of Undergraduate Education, March 6, 2015
- **Building the NIH Grant Workshop**, by Dr. [Name], hosted by Virginia Tech’s Office of VP for Research, February 25, 2015
- **Building the NSF Grant Workshop**, by [Name], hosted by Virginia Tech’s Office of VP for Research, April 20, 2014.
### FORM D - IV E  GRANT PROPOSALS

List grant proposals submitted during reporting period relating to teaching, research and creative activities, or service within the academic and broader community. Include grants in support of outreach, international, urban, and extension activities.

<table>
<thead>
<tr>
<th>Name of Granting Agency (Grantor)</th>
<th>Focus of Grant (Focus)</th>
<th>Date Submitted</th>
<th>$ Amount Requested</th>
<th>Pending</th>
<th>$ Amt Funded</th>
<th>Not Funded</th>
<th>$ Amount Assigned to Faculty Candidate (if Applicable)</th>
<th>Principal/Co-Investigators (if not faculty candidate)</th>
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<tbody>
<tr>
<td>I. Instruction</td>
<td></td>
<td>6/2017</td>
<td>$3,509</td>
<td>☐</td>
<td>$3,509</td>
<td>☐</td>
<td></td>
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<tr>
<td>Grantor: MSU</td>
<td>Enhanced Teaching and Learning Environment for Building Information Modeling (BIM) Technology and Practice</td>
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<tr>
<td>APP: N/A Internal</td>
<td></td>
<td>6/2017</td>
<td>$3,509</td>
<td>☐</td>
<td>$3,509</td>
<td>☐</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. Research/Creative Activity

| Grantor: National Science Foundation | 9/2017 | $262,055 | ☒ | | | | (co-PI) |
| Construction Management Seminar to BOSCH VP and Headquarter Management |

| Grantor: National Science Foundation | 7/2017 | $500,000 | ☒ | | | | |
| Focus: CAREER: Human-Centered and Intelligent Building Energy Efficiency |

| Grantor: Federal Highway Administration | 6/2017 | $250,000 | ☐ | $95,756 | ☐ | $23,939 | (PI) |
| Focus: Work Zone Safety Training (year 1 of 3) |

| Grantor: Envl Research & Education Fdn. | 6/2017 | 98,000 | ☐ | | | | |
| APP: N/A Pre-proposal |

*Anyone with an MSU Net username and password can log onto the web-based Information Reference database, maintained by the Office of Contract and Grant Administration, to search for records of proposals and grant awards by principal investigator. Printed may be attached to this page.*
## FORM D-IV E  GRANT PROPOSALS

<table>
<thead>
<tr>
<th>Name of Granting Agency (Grantor)</th>
<th>Focus (Foci)</th>
<th>Date Submitted</th>
<th>$ Amount Requested</th>
<th>Pending</th>
<th>$ Amt Funded</th>
<th>Not Funded</th>
<th>$ Amount Assigned to Faculty Candidate (if Applicable)</th>
<th>Principal/Co-Investigators (if not faculty candidate)</th>
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</thead>
<tbody>
<tr>
<td><strong>Grantee:</strong> Michigan Dept. of Transportation</td>
<td>Deconstruction Practice on the Solid Waste Industry</td>
<td>4/2017</td>
<td>$200,705</td>
<td>❌</td>
<td>$200,705</td>
<td>❌</td>
<td>$50,176</td>
<td>[Redacted]</td>
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<tr>
<td><strong>Grantee:</strong> Research on the Operational Costs and Benefits of Speed Feedback Signs</td>
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<tr>
<td><strong>Grantee:</strong> Virginia</td>
<td>Data Mining on Educational Impact to Residential Energy Efficiency</td>
<td>3/2017</td>
<td>$3,000</td>
<td>❌</td>
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<td>$3,000</td>
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<tr>
<td><strong>Grantee:</strong> BIM-based Integration for Energy Efficiency and Sustainability</td>
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<tr>
<td><strong>Grantee:</strong> Michigan Dept. of Transportation</td>
<td>3D Highway Design Cost Benefit Analysis</td>
<td>12/2016</td>
<td>$171,998</td>
<td>❌</td>
<td></td>
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<tr>
<td><strong>Grantee:</strong> Sociotechnical Barriers to OSH Implementation for Small and Medium Sized Construction Firms</td>
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<tr>
<td><strong>Grantee:</strong> National Science Foundation</td>
<td>Domicology Education in CONSTRUCTION</td>
<td>10/2016</td>
<td>$297,000</td>
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<td>An EEG-embedded Wearable System as an Engineering Control to Monitor Fatigue in Construction</td>
<td>10/2016</td>
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<table>
<thead>
<tr>
<th>Name of Granting Agency (Grantor)</th>
<th>Focus of Grant (Focus)</th>
<th>Date Submitted</th>
<th>$ Amount Requested</th>
<th>Pending</th>
<th>$ Amt Funded</th>
<th>Not Funded</th>
<th>$ Amount Assigned to Faculty Candidate (if Applicable)</th>
<th>Principal/Co-Investigators (if not faculty candidate)</th>
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<td>Virginia Housing Development Auth. APP: 150687, RC106573</td>
<td>Data Mining on Economic Impacts and Planning Strategies for Housing Development</td>
<td>10/2016</td>
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<td>Effects of Energy Education on Residential Energy Efficiency</td>
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<td>U.S. Dept. of Housing &amp; Urban Dev. APP: 151967</td>
<td>Economic Impacts of LIHTC's Green Building Policy on Occupants and Developers through Improved Energy Efficiency</td>
<td>9/2016</td>
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<td>Research Initiation: Fostering Global Competence</td>
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<td>MSU (Internal) APP: N/A Internal</td>
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<td>Transportation Research Board APP: 148185</td>
<td>Integrating Airport Sustainability</td>
<td>2/2016</td>
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<td>Data Mining, Analysis, and Visualization for Construction Fatality and Prevention</td>
<td>12/2015</td>
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<td>An Instrument and Adoption Framework for Student Cognitive and Social Engagement with a Course</td>
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III. a. Service – Academic Community
> Grantor: 
> Focus: 

III. b. Service – Broader Community

1. MSU Extension
> Grantor: 
> Focus: 

2. Professional/Patient Care Activities
> Grantor: 
> Focus: 

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