

## GRANTS

### Internal

Maxim, B. "Nattu Natarajan Collegiate Professor Discretionary Award", CECS, 9/17-6/27, (\$60000, PI).

Maxim, B. R. "Socially Distanced Active Learning for Engineering Students", Creative Teaching and Learning Fund, UM-Dearborn, 06/21-12/23, (\$3000, PI).

Maxim, B. "Teaching and Learning Hub Affiliate", UM-Dearborn, 1/23-12/23, (\$4000, PI)

Maxim, B. "Undergraduate Research Assistant", Campus Grants, UM-Dearborn, 5/23-9/23, (\$3200, PI).

Maxim, B. R. "Making Game Design More Accessible", Creative Teaching and Learning Fund, UM-Dearborn, 12/21-12/22, (\$3000, PI).

Maxim, B. "Undergraduate Research Assistant", Campus Grants, UM-Dearborn, 5/22-9/22, (\$3200, PI).

Maxim, B. R. "Socially Distanced Active Learning for Engineering Students", Creative Teaching and Learning Fund, UM-Dearborn, 06/21-12/23, (\$3000, PI).

Maxim, B. "Undergraduate Research Assistant", Campus Grants, UM-Dearborn, 5/21-9/21, (\$3200, PI).

Maxim, B. "Grader for Senior Design", Teaching and Learning HUB, UM-Dearborn, 1/21-4/21, (\$1000, PI).

Maxim, B. R. and Callahan, M. "Gamification of Personal Empowerment Process", Creative Teaching and Learning Fund, UM-Dearborn, 11/19-12/20, (\$3000 with \$3000 matching funds, PI).

Maxim, B. "Undergraduate Research Assistant", Campus Grants, UM-Dearborn, 5/19-8/19, (\$3200, PI).

Maxim, B.; Kumao, H.; Merrill, C.; and Alvarez, B. "Interrogating the Library: Re-connecting to Collections", MCubed 3.0, University of Michigan, 2/19-12/22, (\$15000, PI).

Alvarez, B.; Kumao, H.; Maxim, B.; and Merrill, C. "Collect/Connect Game", Library Creative Project Fund, University of Michigan, 1/19-5/19, (\$1125, CoPI).

Kumao, H.; Maxim, B.; Merrill, C.; and Alvarez, B. "Bookmarks: Speculating the Futures of the Book and Library", School of

Art, University of Michigan, 2/19-5/19,(\$6000, CoPI).

Maxim, B., Ortiz, L. and Luera, G. "Teaching Artificial Intelligence Using Active Learning, Gamification, and Scaffolding", Henry W. Patton Center for Engineering Education Grant Program, UM-Dearborn, 5/18-6/19, (\$5000, PI).

Maxim, B. "Undergraduate Research Assistant", Campus Grants, UM-Dearborn, 5/18-8/18, (\$3000, PI).

Maxim, B., Ortiz, L. and Luera, G. "Adding Active Learning and Gamification to an Artificial Intelligence Course (CIS 479/579)", Creative Teaching Learning Fund, UM-Dearborn, 5/18-6/22, (\$3000, PI).

Maxim, B. "Creating a Virtual Model of the New Engineering Laboratory Building", CECS Dean, 1/18-5/18, (\$8000, PI).

Maxim, B. and Kessentini, M. "A Better Understanding of Software Refactoring by Automated Search and Mining Software Repositories", Henry W. Patton Center for Engineering Education Grant Program, UM-Dearborn, 4/17-12/18, (\$18000, PI)

Maxim, B. and Brunvand, S. "Introducing Active Learning and Gamification to a Software Project Course", Creative Teaching Fund UM-Dearborn, 5/17-12/17, (\$1000 with \$1000 matching funds).

Kessentini, M.; Maxim, B.; and Neji, S. "Gamifying and Socializing the Teaching and Learning of Software Engineering", Creative Teaching Fund UM-Dearborn, 6/17-4/18, \$3000,(CoPI B. Maxim, S. Neji).

Maxim, B. and Brunvand, S. "Introducing Role-Play and Gamification into a Software Project Course", Creative Teaching Fund,UM-Dearborn, 1/17-5/17, (\$960 with \$960 matching funds, PI).

Lindquist, M.; Maxim, B.; Proctor, J.; and Dolins, F. "Improving environmental decision-making through multisensory simulation: The contribution of sound to 3D landscape visualization perception", MCubed, University of Michigan, 5/16-12/17, (\$60000, CoPI).

Dehzangi, O. and Maxim, B. "Designing a Real-Time Driver Authentication System: Gait Pattern Recognition via Wearable Motion Sensors", Office of Sponsored Research, UM-Dearborn, 5/16-5/17, (\$14800, CoPI).

Maxim, B.; Kessentini, M.; Brunvand, S.; and Acharya, S. "Transforming a lecture heavy course (CIS 375) into mini-learning workshops", Advanced Teaching and Learning Fund, UM-Dearborn, 3/16-12/16, (\$3000 with \$3000 matching funds, PI).

Kessentini, M.; Maxim, B.; and Brunvand, S. "On the Use of Emotional and Social Factors to Improve Students Success and Retention Rate", Advanced Teaching and Learning Fund,

UM-Dearborn, 3/16-12/16, (\$2500 CoPI).

Kessentini, M. and Maxim, B. "Computer Science Curricula and Technologies for Blind and Visually Impaired Students", Henry W. Patton Center for Engineering Education Grant Program, UM-Dearborn, 2/16-12/16, (\$5000, CoPI).

Merrill, C.; Kumao, H.; Alvarez, B.; and Maxim, B. "Automaton in the Collection: An Interactive Library Game", MCubed, University of Michigan, 10/15-12/17, (\$60000, CoPI).

Maxim, B. "Distinguished Teaching Award", University of Michigan-Dearborn, Winter 2015, (\$3000 PI).

Maxim, B. "Academic Service Learning Course", Office of Civic Engagement, Winter 2014, (\$500 PI).

Maxim, B. "Academic Service Learning Course", Office of Civic Engagement, Winter 2013, (\$500 PI).

Maxim, B. "Using Social Media to Teach Engineering Process", Office of Sponsored Research, UM-Dearborn, 1/11-4/12, (\$6000 with \$2000 PI).

Maxim, B. "College of Engineering and Computer Science Design Competition Advisor's Award - Winning CIS Team, Winter 2014, (\$500 PI with K. Akingbehin).

Maxim, B. "College of Engineering and Computer Science Design Competition Advisor's Award - Winning CECS Team, Winter 2013, (\$750 PI with K. Akingbehin).

Maxim, B. "College of Engineering and Computer Science Design Competition Advisor's Award - Winning CECS Team, Winter 2012, (\$750 PI with K. Akingbehin).

Maxim, B. College of Engineering and Computer Science 2011 Design Competition Advisor's Award - Winning CIS Team (\$500 PI).

Xu, Z. "Model-Driven Self Healing Software Engineering," Henry Patton Center for Engineering Education and Practice, 9/08-8/10, \$60,000 (CoPI: N. Seliya, B. Maxim, and J. Guo)

Maxim, B. "UM-Dearborn Service Learning Fellow", 2009-2010, (\$1000 PI).

Maxim, B. "College of Engineering and Computer Science Design Competition Advisor's Award - Winning CECS Team, Winter 2010, (\$750 PI with K. Akingbehin).

Maxim, B. "College of Engineering and Computer Science Design Competition Advisor's Award - Winning CECS Team, Winter 2009, (\$750 PI).

Maxim, B. "External Service Award", University of Michigan-Dearborn, Winter 2008,(\$3000 PI).

Maxim, B. "Distance Learning Course CIS 577", CECS Development Award, Winter 2008, (\$3500 PI).

Maxim, B, "College of Engineering and Computer Science Design Competition Advisor's Award - Winning CIS Team, Winter 2008, (\$500 PI with Akingbehin, K.).

Maxim, B. "Game Design Laboratory", CECS Dean, Fall 2007, (\$62,500 PI with Elenbogen, B.; Shen, J.; and Grosky, W.).

Maxim, B. R. and Patel, N. "Learning by Gaming: An Immersive Environment for Teaching Kids Cursive Handwriting", CEEP, 9/07 - 8/08, (\$35,000 PI).

Maxim, B. "College of Engineering and Computer Science Design Competition Advisor's Award - Winning CIS Team, Winter 2007, (\$500 PI with Akingbehin, K.).

Maxim, B. R. and Patel, N. "Learning by Gaming: An Immersive Environment for Teaching Kids Cursive Handwriting", CEEP, 9/06 - 8/07, (\$26,000 PI).

Maxim, B. "Distance Learning Course CIS 488/588", CECS Development Award, Winter 2006, (\$3,500 PI).

Maxim, B. "College of Engineering and Computer Science Design Competition Advisor's Award - Winning CECS Team, Winter 2006, (\$1000 PI with Patel, N.).

Maxim, B. "Torque Game Engine Licenses", CECS Dean, Winter 2006, (\$2,500 PI).

Seliya, N. "Agile Software Engineering Laboratory", CECS Dean, Winter 2006, (\$40,000 CoPI: Maxim, B.; Patel, N.; and Grosky, W.

Maxim, B. "Distance Learning Course CIS 487/587", CECS Development Award, Fall 2005, (\$3,500 PI).

Maxim, B. "Distance Learning Course CIS/ECE 479 and CIS 579", CECS Development Award, Spring 2005, (\$6000 PI).

Maxim, B. "College of Engineering and Computer Science Design Competition Advisor's Award - Winning CIS

Team, Winter 2005, (\$500 PI with Akingbehin, K.).

Maxim, B. "Laboratory Equipment Replacement 1190EC",  
CECS Dean, 2004, (\$40,000 PI).

Maxim, B. College of Engineering and Computer Science  
2004 Design Competition Advisor's Award -Winning  
CECS Team (\$750 PI).

Maxim, B. "Laboratory Equipment Replacement 1080EC", CECS  
Dean, 2003, (\$36,000 PI).

Maxim, B. College of Engineering and Computer Science  
2003 Design Competition Advisor's Award - Winning  
CIS Team (\$500 PI).

Maxim, B. College of Engineering and Computer Science  
2002 Design Competition Advisor's Award - Winning  
CIS Team (\$500 PI).

Maxim, B. College of Engineering and Computer Science  
2001 Design Competition Advisor's Award - Winning  
CIS Team (\$500 PI).

Maxim, B.; Agius, M.; George, D.; Nagy, J. and Smojver,  
T. "Purchase Hardware to Support Interactive  
Training System", UMD Campus Grants (\$275 PI).

Maxim, B.; Kozlowski, E.; Lake, J.; and Patel, J.  
"Software to Support Distributed Data Collection",  
UMD Campus Grants (\$350 PI).

Maxim, B. College of Engineering and Computer Science  
Support for WWW Course Material Creation (\$800 - PI).

Maxim, B.; Deng, J.; Patel, B. and Yu, R. "Hardware to  
Support Distributed data Collection". UMD Campus  
Grants (\$500 PI).

Maxim, B.; Marcus, K.; and Blais, M. "Purchase Hardware  
to Support Experiments with Autonomous Intelligent  
Agents", UMD Campus Grants (\$360 PI).

Maxim, B. College of Engineering and Computer Science  
Support for WWW Course Material Creation (\$2000 PI)

Maxim, B. College of Engineering and Computer Science  
2000 Design Competition Advisor's Award - Winning  
CIS Team (\$500 PI).

Maxim, B.; Modesitt, K.; Elenbogen, B.; and Akingbehin,  
K. "Purchase of Software and User Interaction

Devices to Support User Interface Design and Software Engineering Instruction", 1999 Chancellor's Technology Fund, (\$1,050 PI).

Ray, I.; Ray, I.; and Maxim, B. "Design and Verification of Secure E-Commerce Protocols: DFR Model Checker License", UMD Campus Grants (\$1,500 PI).

Yoon, D., Maxim, B., et. al. "The Integration of CAD and CAM via CORBA", 1999 Chancellor's Technology Fund, (\$3,000 CoPI).

Maxim, B. "Proposal for a World Wide Web Engineering Case Study: Student Schedule Generation Tool", UMD Center for Engineering Education and Practice, (\$2,000 PI).

Maxim, B. College of Engineering and Computer Science Design Competition Advisor's Award 1999 - Winning College Team (\$750 PI).

Maxim, B. College of Engineering and Computer Science Support for WWW Course Material Creation (\$400 PI).

Maxim, B.; Modesitt, K.; and Ray, I.; and Ray, I. "Desktop Distance Learning Software", 1998 Chancellor's Technology Fund, (\$3,000 PI).

Maxim, B.; Modesitt, K.; Elenbogen, B.; Tsui, L.; and Yoon, D. "High Resolution, Portable, Multimedia Computer Projector", 1998 Chancellor's Technology Fund, (\$7,000 PI).

Maxim, B. College of Engineering and Computer Science Design Competition Advisor's Award - Winning College Team, 1998 (\$1,000 PI).

Maxim, B. College of Engineering and Computer Science Support for WWW Course Material Creation (\$1,200 PI)

Maxim, B.; Modesitt, K.; and Zhu, Q. "Supporting Development of Embedded Intelligent Software", 1997 Chancellor's Technology Fund (\$3,000 PI).

Maxim, B. and Elenbogen, B. 1997 School of Engineering Design Competition Advisor's Award (\$500 PI).

Maxim, B.; Modesitt, K.; and Kannan, R. "Supporting Collaborative Work Using Desktop Video Conferencing", 1996 Chancellor's Technology Fund (\$4,000 PI).

Maxim, B. R.; Zhu, Q; and Ray, S. "Development of a Video Conferencing Network", 1995 Chancellor's Technology Fund (\$3,050 PI).

Maxim, B. "Development of a Hashing Tool", 1993 Chancellor's Technology Fund (\$1,000 PI).

Akingbehin, K. and Maxim, B. "A Wireless Classroom Connection to CIS Local Area Network", 1993 Chancellor's Technology Fund (\$2,000 PI).

Maxim, B. "Adding an Ethics Component to the Undergraduate Computer Science Curriculum", 1992 University of Michigan-Dearborn Educational Enhancement Grant (\$1,050 PI).

#### External: Cash

Maxim, B. R. and Callahan, M. "Hackathon", Ford Motor Company, 9/21-4/23, (\$7,000 PI).

Maxim, B. R. and Callahan, M. "Gamification of Personal Empowerment Process", Ford Motor Company Fund, 9/19-8/20, (\$5,000 PI).

Lemos, M.; Lindquist, M.; Campbell-Arvai; V. and Maxim, B. "Evaluating Ecosystem Service Tradeoffs in the Design, Planning & Management of Urban Forests: Synthesizing SDM, Scenario Planning and Landscape Visualization", McIntire-Stennis Cooperative Forestry Research Program, 8/17-8/22, (\$350,859 with \$56,000 matching, Collaborator).

Maxim, B. R. "Development of a Software Engineering Process Improvement Game", Association of Computing Machinery Special Interest Group on Computer Science Education, 1/16 - 12/16, (\$3,200 PI).

Cristiano, J. and Maxim, B. "Campus of Hope: Using the Virtual World to Improve Our World," Ford College Community Challenge, 9/08-4/15 (\$100,000 with \$45,000 matching CoPI)

Maxim, B. R. "Learning by Gaming: An Immersive Environment for Teaching Kids Cursive Handwriting", Verizon Foundation, 9/07 - 8/08, (\$9,500 PI).

Maxim, B. R. and Grosky, W. "Educating Homo Ludens: Introducing Information Technology Through Game Design", Association of Computing Machinery Special Interest Group on Computer Science Education, 7/06 - 6/07, (\$3,600 PI).

Shen, J.; Akingbehin, K.; Maxim, B.; and Yoon, D.  
"Preliminary Study on Open Architecture E-Computing  
Center for Design in Engineering and Science",  
Ameritech award, 9/02-8/03 (\$17,000 CoPI).

Ray, I.; Akingbehin, K.; Maxim, B.; Ray, I.; and Zhu, Q.  
"Computer and Network Security Research Center",  
National Science Foundation 9/99 - 8/02 Research  
Instrumentation grant (\$83,934 with \$74,004  
Matching CoPI).

Maxim, B. and Elenbogen, B. "Distance Learning in  
Computer and Information Science Courses Using  
Virtual Computing Laboratories", Ameritech,  
(\$24,500 PI)

Akingbehin, K.; Maxim, B.; Elenbogen, B.; Tsui, L.; and  
Yoon, D. "Development of an Open Systems  
Laboratory", National Science Foundation 1994 ILI  
award, (\$44,000 CoPI).

Elenbogen, B.; Maxim, B.; Akingbehin, K.; Tsui, L.; and  
Yoon, D. "Parallel and Distributed Computing  
Laboratory", National Science Foundation 1994 ILI  
award, (\$52,000 CoPI).

Maxim, B. and Akingbehin, K. "1991 Program Development  
Grant", Marathon Oil Corporation (\$1,500).

Maxim, B. and Akingbehin, K. "1990 Knowledge Engineering  
Program Development Grant", Federal Mogul  
Corporation (\$5,000 PI).

Maxim, B. and Akingbehin, K. "1990 Program Development  
Grant", Marathon Oil Corporation (\$2,000 PI).

Maxim, B. and Akingbehin, K. "1989 Knowledge Engineering  
Program Development Grant", Federal Mogul  
Corporation (\$5,000 PI).

Verhey, R. and Maxim, B. "1989 Program Development  
Grant", Marathon Oil Corporation (\$2,000 PI).

Verhey, R. and Maxim, B. "1988 Program Development  
Grant", Marathon Oil Corporation (\$2,000 CoPI).

Verhey, R. and Maxim, B. "1987 Program Development  
Grant", Marathon Oil Corporation (\$2,000 CoPI).

Maxim, B. "Development of Algorithm Animation Software to  
Support Computer Science Instruction", 1986  
University of Michigan Center for Research on



Learning and Teaching Educational Enhancement Grant  
(\$3,600 PI).

Verhey, R. and Maxim, B. "1986 Program Development  
Grant", Marathon Oil Corporation (\$2,000 CoPI).

External: In-kind

Maxim, B, "2012 BlackBerry Education Partner", ten  
BlackBerry Torch Cell Phones, five 16GB Playbooks,  
three 32GB Playbooks, (Hardware with estimated market  
value \$9300 PI).

Maxim, B. and Modesitt, K. "1999 Microsoft Laboratory  
Software Licenses", Microsoft Corporation, (Software with  
estimated market value \$50,000 PI).

Maxim, B. and Modesitt, K. "1998 Microsoft Visual  
Development Studio Lab Grant", Microsoft Corporation  
(Software with estimated market value \$4,000 PI).

Maxim, B. and Modesitt, K. "July 1997 Microsoft  
Developer Curriculum Project", Microsoft Corporation  
(Software with estimated market value \$99,300 PI).

Maxim, B. and Modesitt, K. "March 1997 Microsoft  
Developer Curriculum Project", Microsoft Corporation  
(Software with estimated market value \$68,500 PI).

Maxim, B. and Modesitt, K. "July 1996 Microsoft  
Developer Curriculum Project", Microsoft Corporation  
(Software with estimated market value \$58,500 PI).

Maxim, B. and Modesitt, K. "1995 Oracle Educational  
Partner", Oracle Corporation, (Software with estimated  
market value \$1,200,000 PI).