



Registration Packet
33rd Annual MI/AIR Conference
“Blazing Trails to Data Informed Decision Making”

November 6-8, 2019
Treetops Resort
Gaylord, Michigan

Dear MI/AIR Colleague,

As the Fall semester opens, institutional researchers like you are forging ahead on their data-seeking journeys. To help with those journeys, the 2019 MI/AIR Steering Committee would like to announce our 33rd Annual Conference! This conference is an opportunity for you to discover the incredible work of IR professionals throughout the state. It is sure to be a *trail-blazing** and illuminating experience!



This year's conference will be at *Treetops Resort* in Gaylord, Michigan. The programming will begin with a pre-conference workshop on Wednesday afternoon. By popular demand, this workshop will be a hands-on demonstration featuring *Microsoft Power BI* and it will showcase how this tool can be easily deployed to accomplish common IR tasks. Next, the Steering Committee has received numerous proposals resulting in a full schedule of informative and inspiring presentations. Sessions will occur Thursday and Friday and descriptions of this year's presentations are given on the following pages. The schedule of presentation times and room locations will be provided to attendees in advance.

The theme of this year's conference is *Blazing Trails to Data Informed Decision Making*. Like the trails set in the forested landscape surrounding our conference venue, our efforts as institutional researchers allow smooth passage forward for our institutions. This conference is designed to provide you with numerous opportunities to interact with colleagues and to discover new paths through the sometimes challenging terrain of the IR world. The welcoming atmosphere and the willingness to journey together are qualities that make the MI/AIR Annual Conference a rewarding destination for all IR adventurers.

Please make sure to register early for both the Conference and the Pre-Conference Workshop. Lodging is provided by *Treetops Resort* and should also be booked in advance. Complete details on lodging and registration can be found on the following pages. We are looking forward to seeing you at the 33rd Annual Conference!

**For our exciting Thursday evening social and dinner festivities, attendees are encouraged to wear their favorite lumberjack-plaid shirts, or their favorite hiking, fishing, camouflage, wolf, bear, or Bigfoot apparel!*

Best regards,
Derick Fedewa, Chair
2019 MI/AIR Steering Committee

MI/ AIR 2019 Steering Committee Members

Derick Fedewa, Chair
Davenport University

Nick Baker
Kirtland Community College

Joy Evans
Northwestern Michigan College

David Sailer
Wayne State University

Noah Pollock, Chair-Elect
Oakland University

Maia Bergman
University of Michigan

Christine Kelly-Williams
University of Michigan-Dearborn

Mary Meier, Treasurer
Central Michigan University

Mark Champion
Grand Rapids Community College

Roger Mourad
Washtenaw Community College

33rd Annual MI/AIR Conference “Blazing Trails to Data Informed Decision Making”

Treetops Resort Gaylord, Michigan

Registration

The conference registration fee covers: all program materials; facility rental; breakfast, lunch, snacks, and dinner on Thursday; and breakfast on Friday morning.

Conference Registration Fee: \$150 due October 6, 2019
 \$170 if received after October 6, 2019

Pre-Conference Workshop Registration Fee: \$40

To register website: <http://miair.org/tickets>

Contact Mary Meier with questions or concerns: (989) 774-7221 or meier1me@cmich.edu

Conference check-in will take place at the registration table in the Juniper Room just to the right of the lobby in the Lodge during the following dates/times:

Wednesday, November 6 th	12:00 pm - 1:00 pm and 5:00 - 6:00 pm
Thursday, November 7 th	7:30 - 8:30 am



Lodging



Treetops Resort
3962 Wilkinson Road
Gaylord, MI 49735
(866) 348-5249

Treetops Resort is the 2019 MI/ AIR conference host hotel and is located on Wilkinson Road, northeast of I-75 and exit 282 which is M-32 (Main Street). [View on GoogleMaps](#)

While rooms are available at both the Lodge and the Inn, the conference will be held at the Lodge. MI/ AIR has reserved three blocks of rooms; book early as the resort fills quickly:

- Standard Rooms at the Inn \$ 99.00 + \$ 15.00 resort fee + tax
- Queen Rooms at the Lodge \$ 129.00 + \$ 15.00 resort fee + tax
- Queen Deluxe Rooms at the Lodge \$ 129.00 + \$ 15.00 resort fee + tax

The block of rooms will be held at this rate until **Sunday, October 6, 2019**. Guests will need to pay the first nights stay as the deposit. The remaining balance will be billed at check out.

If your institution is paying for your conference stay and has tax-exempt status, provide Treetops with the appropriate documentation and they will adjust your bill. Fees are charged at time of reservations.

The daily \$ 15.00 resort fee includes Wi-Fi and parking, as well as access to a fitness center, indoor pool and hot tub, and outdoor pool. Please see the [resort website](#) to view spa and golf fees.

Please make your reservation by calling (866) 348-5249 and asking for the Michigan Association for Institutional Research conference rate.

Although meals will be included at the conference, the resort has two restaurants options:

- The Sports Bar Comfort food, artisan pizza, and Kobe burgers
- Legends on the Hill Classic American dining, seasonal buffets, incredible views



The Lodge

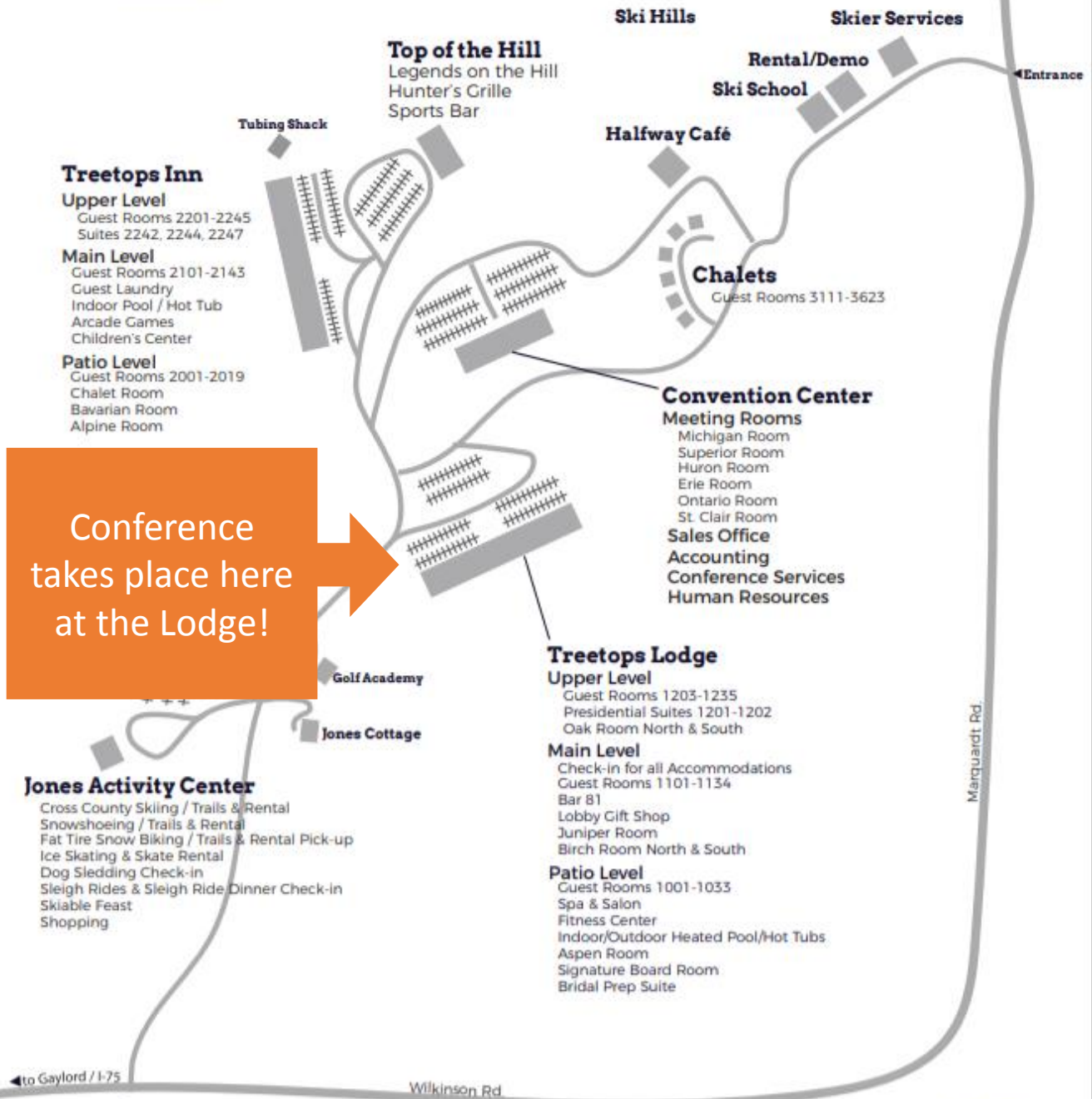


The Inn

Treetops Facility Map



Treetops Main Property



Conference
takes place here
at the Lodge!

▲
Main Entrance

Treetops Resort
3962 Wilkinson Rd. Gaylord, MI 49735
(855) 470-1871
info@treetops.com



Conference Menus

Thursday Menus

Breakfast

Scrambled eggs
Scrambled eggs with cheddar
Breakfast potato
Bacon
Fresh cut fruit
Breakfast breads
Coffee, tea, juices

Fiesta Lunch Buffet

Spanish rice
Flour tortillas and corn tortilla chips
Refried beans
Seasoned taco meat
Chicken fajita
Condiments
Cookies and brownies
Coffee, tea, water, lemonade, iced tea

Afternoon Snacks

Tortilla chips
Salsa
Guacamole
Potato chips
French onion dip
Coffee, water

Dinner Buffet

House salad bar
Roasted redskin potato
Seasonal vegetables
Parmesan Crusted Chicken Breast
Baked whitefish with capers, bell pepper,
green onion, and lemon butter sauce
Chargrilled new York Strip with
sautéed mushrooms and onions
Fresh baked rolls
Pies
Coffee, tea, water, lemonade, iced tea

Friday Menus

Morning Breakfast

Scrambled eggs
Scrambled eggs with cheddar
Breakfast potato
Bacon
Fresh cut fruit
Breakfast breads
Coffee, tea, juices

Registrants with specific dietary requirements may describe them in the registration form.

Pre-Conference Workshop

Progressing from Paltry to Polished in Power BI Wednesday 1:00 – 5:00 pm
David Sailer, Wayne State University

PowerBI is one of the newer Business Intelligence tools on the marketplace, but it has some distinct advantages over SAS VA and Tableau in terms of cost and ease of use. While most of the discussions around PowerBI focus on its business use, it is also extremely well suited for use by Institutional Research offices. This workshop is meant to be a direct and efficient introduction on how to use PowerBI in an Institutional Research setting that avoids business use cases irrelevant to IR – we will start with the tasks common to IR shops and focus on how to use PowerBI to accomplish those tasks. Attendees will walk out knowing how to make a basic dashboard in PowerBI.

Part One: How to Use Power BI (Lecture)

- How to Prepare Data, Data Considerations, and Importing Data into Power BI
- Data Manipulation within Power BI
- Refreshing Data in Power BI
- Setting Up Your First Visualization
- Customizing Visualizations and Publishing to the Web

Part Two: Make a dashboard!

- Hands on experience.

Learning Objectives - Participants in this workshop will learn how to:

1. Clean and structure data before importing it into PowerBI.
2. Interact with data within PowerBI.
3. Convert that data into an effective visual dashboard.
4. Customize and polish that dashboard.

Experience Level:

Beginner.

No visualization experience necessary. Need only have the basic technical skills such as experience working with datasets and Excel.

Attendee Technology Requirements:

Attendees must bring a laptop with Microsoft Excel and Microsoft PowerBI installed.

PowerBI is available as a free download from Microsoft.

See: <https://powerbi.microsoft.com/en-us/get-started/> Datasets

Instructions will be provided ahead of time.



Listing of Presentation Sessions by Title

- A Comparative Analysis of Persistence Patterns of Students between Intent and Non-Intent Majors
- A Formula for Keeping IR Interesting - Useful Perspective and Strategies for IR Offices
- A Simple Approach to Predicting Continuing Student Enrollment
- ARTIS: A Home-grown Alternative to Closing the Loop in Student Learning Assessment
- Collecting and Reporting Post-Graduation Outcomes
- Data Visualization: Advantages and Possibilities of Misinterpretation
- Develop a Comprehensive Matrix to Assess and Improve Academic Advising
- Doctoral Stop-out Behavior and Attrition
- Evaluating New Program Proposals In-House – Benefits and Limitations Over Using Consultants
- Identifying and Bridging the Gap between Admissions and Enrollment
- Impact of Reforming Preparatory Math Courses at Michigan State University on First Year Student Success Outcomes
- Increasing Efficiencies in the Admissions Office: Predictive Models for the Fall 2019 Freshman Class
- Open-Sourced IR: Zero-Cost Solutions for Data Management, Analytics, and Reporting
- Professional Development in Artificial Intelligence: A Beginner’s Introduction to TensorFlow
- Study of the Relationship Between Community College Transfer Pathway and Bachelor’s Degree Completion: Importance of the Michigan Transfer Agreement
- The New Michigan Transfer Network
- Understanding Student Transfer Behavior at Mid Michigan College Using Predictive Data Mining Techniques
- US News Ranking and Score Estimator
- Using Early Momentum Metrics to Predict First-year Student Retention and Six-year Degree Completion
- Visualizing Student Enrollment, Demographic, & Outcome Data
- What’s in a Grade: Lessons Learned from Changing Grading Scales
- Why Worry When Students Change Majors? What MSU Data Shows

Presentation Session Descriptions - Alphabetical

A Comparative Analysis of Persistence Patterns of Students between Intent and Non-Intent Majors

Presenter(s)	Archit Agarwal and Bin Ning
Institution	Eastern Michigan University
Abstract	Many universities offer a spectrum of intent majors, especially in disciplines that require secondary admissions, such as nursing-intent, accounting-intent, etc. Many students who are enrolled in those intent majors make switches to majors other than their initial intention. This study uses Eastern Michigan University (EMU) as an example to look into the persistence patterns of students who claim an intent vs a non-intent major at the beginning of their enrollment. EMU offers 27 intent majors. Each fall, on the average 656 (or 27%) of FTIAC students are enrolled in intent majors and 1,780 in non-intent majors.

A Formula for Keeping IR Interesting - Useful Perspective and Strategies for IR Offices

Presenter(s)	Robert M Roe
Institution	Central Michigan University
Abstract	Over time, the fundamental functions of IR offices can become mundane and tedious. Add to this the large number of daily irritants and IR as a career can lose it's admittedly limited appeal. However, with the right perspective, every day in the office can be an adventure. The fundamental approach in our office is to treat tasks and requests with a combination of respect and irreverence as defined by the following formula: $\text{perspective} = x \cdot \text{respect} + (1-x) \cdot \text{irreverence}$ (where $0 \leq x \leq 1$). The key is finding the appropriate value of x for each situation. A request from the president may warrant a large value such as .95 whereas an external request may be as low as .01. As $x \rightarrow 0$, a series of rants about the absurdity of situations arise. A long list of specific irritants and their corresponding rants will be discussed (e.g. fake familiarity - Rob instead of Robert). On a more serious note, effective strategies for working with colleagues both inside and outside of the office will be covered making the presentation relevant to offices as small as 1 FTE.

A Simple Approach to Predicting Continuing Student Enrollment

Presenter(s)	Dan Merian
Institution	University of Michigan-Dearborn
Abstract	Forecasting future enrollment can be a vital component for planning and budgeting at institutions. The task of modeling can seem insurmountable and complex. I will share a simple approach to predicting future enrollments. The foundation of this enrollment prediction model is predicting continuing student enrollment. The prediction is developed by utilizing historical retention rates by cohorts, years enrolled, and student type to predict future enrollment. In this presentation, I will discuss the methodology for the model, what data is needed to build the model, and share performance results of the model at my institution. An advanced understanding of statistical techniques is not required, as the enrollment prediction utilizes simple mathematic operations such as retention calculations and averages.

Presentation Session Descriptions - Alphabetical

ARTIS: A Home-grown Alternative to Closing the Loop in Student Learning Assessment

Presenter(s)	Rachel A. Lathrop
Institution	Oakland Community College
Abstract	After years of challenges in student learning assessment, Oakland Community College developed the Assessment Results Tracking Information System. This home-grown assessment portal allows faculty, coordinators, academic deans and administration to collaborate around assessment. The system includes sophisticated review processes and tracking to ensure the loop is closed in student learning.

Collecting and Reporting Post-Graduation Outcomes

Presenter(s)	Noah Pollock
Institution	Oakland University
Abstract	With the value of a college degree under constant scrutiny by policy-makers, prospects, students, parents, and the media, it is more important than ever to showcase post-graduation outcomes and the return on investment of a college degree from both two-year and four-year institutions. In this presentation, we will cover methods and strategies for collecting and reporting post-graduation outcomes including employment, salary, continuing education, and other trails our graduates traverse. Audience members will gain an awareness of and introduction to methodological standards from nationally recognized organizations, a variety of effective reporting options from dashboards to print publications, the potential for mutually beneficial campus partnerships, and federal and state efforts to collect and report data.

Data Visualization: Advantages and Possibilities of Misinterpretation

Presenter(s)	Lakshmi Charan Kumar Karusala
Institution	Oakland Community College
Abstract	As data analytics has become widely popular in every field, visualization has become a key role player as many business decisions are being directed based on it. Though visualizing simplifies things and shows the whole story in a simple chart, how reliable is the data? Are there hidden facts behind the colorful charts? The Institutional Research department at OCC has tried a competitive approach to identify the performance areas and the process of its implementation. During the process a few topics such as tool smartness and data security as well as displays of outliers in graphing required attention will be discussed to avoid telling the wrong story.

Presentation Session Descriptions - Alphabetical

Develop a Comprehensive Matrix to Assess and Improve Academic Advising

Presenter(s)	Bin Ning
Institution	Eastern Michigan University
Abstract	Academic advising is a critical service that supports student success in college; yet, it frequently receives low satisfaction ratings from many student surveys that ask the question about the quality of academic advising. Nevertheless, how to measure the quality of academic advising more objectively and comprehensively is always a tricky endeavor. This study presents a research-supported approach by using four categories of measures: 1) accessibility and convenience, 2) accuracy, 3) empathy and care, and 4) referral and recommendation. These four constructs are commonly used in the business world to evaluate the quality of customer service. This study can help colleges and universities advance their advising services by: 1) providing a relatively reliable and ongoing measure for us to gauge and improve the quality of advising, 2) serving as a strong impetus for a more comprehensive review and possibly re-engineering our advising systems, and 3) supporting the integration of services with advising through a more holistic approach.

Doctoral Stop-out Behavior and Attrition

Presenter(s)	Maia Bergman and Merle Feldbaum
Institution	University of Michigan - Ann Arbor
Abstract	Could Ph.D student stop-out behavior be a predictor of attrition? At the University of Michigan, a continuous enrollment policy (CE) was adopted in the Fall of 2010 for all Ph.D. students. Accompanying continuous enrollment was a formal leave of absence policy which has allowed for stop-out tracking. This session will discuss analyses of doctoral stop-out behavior and how it may affect attrition/completion outcomes.

Evaluating New Program Proposals In-House - Benefits and Limitations Over Using Consultants

Presenter(s)	Jennifer Boyce and Katie Norton
Institution	Central Michigan University
Abstract	Colleges and universities are always on the lookout for new programs to attract new students. However, faculty who propose new programs are always enthusiastic which can lead to bias when estimating the viability of their proposals. Over the years this has led to some conflicting justifications for approving new programs. For example, one proposal might claim that since there are many other schools in the state with the program, there must be demand and therefore the program would attract students. The very next proposal might claim that because there are no other schools in the state with the program, there must be demand and therefore the program would attract students. Sadly, both conflicting justifications are often accepted by the Program Advisory Council. In order to use a more objective method for evaluating new programs, CMU initiated a process for gathering and interpreting multiple data points to assess the viability of proposed academic programs. In this session you will learn types of data needed, where the data can be found, and how the data can objectively inform decisions. Roadblocks, solutions, and lessons learned along the way will be discussed.

Presentation Session Descriptions - Alphabetical

Identifying and Bridging the Gap between Admissions and Enrollment

Presenter(s)	Zheng Wang
Institution	Oakland Community College
Abstract	<p>Prospective students are often sending one application to multiple schools but ultimately select only one to attend or choose not to move on to college, leading to a large gap between admissions and enrollment at most universities/colleges. In Fall 2018, Oakland Community College accepted 11,425 students and 3,707 of them went on to enroll at the college, resulting in a 32.4% yield rate. What happened to the 7,718 students in the gap? What the college can do to bridge the gap? To answer these questions, our IE office conducted an analysis where we first identified students in the gap and explored potential factors contributing to the gap by analyzing student demographic data from the college's recruitment system, registration history and financial aid data from the college's student information system, and college enrollment data from National Student Clearinghouse. Based on the findings, we then worked with admission office and student services to develop new recruitment plans and to identify and remove potential service bottlenecks for new students, with the goal to increase yield rates. The Fall 2019 yield rate will be presented.</p>

Impact of Reforming Preparatory Math Courses at Michigan State University on First Year Student Success Outcomes

Presenter(s)	Susan Richter
Institution	Michigan State University
Abstract	<p>At MSU, the preparatory algebra course had one of the highest drop, fail, withdraw rate and six percent of students who started in preparatory math received a STEM degree. The high DFW rate and low STEM graduation rate, prompted the math department to offer two new math pathways starting in Fall 2018. First, students who were in a non-calculus based major had the option of taking a quantitative literacy course. Second, students whose major required calculus and, who would have placed into preparatory college algebra, could take a two-semester credit bearing course that substituted for college algebra. Institutional Research also evaluated the placement strategy for the preparatory algebra courses and identified that 10% of students were underplaced. These three changes could have a profound impact on persistence and graduation rates, but also on the institution's opportunity gaps. In this presentation, we will showcase the results from the quantitative literacy and reformed preparatory college algebra courses. Results will include the impact on term and cumulative GPA, as well as academic standing, persistence rates and first year college math completion. We will also discuss results in the context of the revised and previous math placement methods.</p>

Presentation Session Descriptions - Alphabetical

Increasing Efficiencies in the Admissions Office: Predictive Models for the Fall 2019 Freshman Class

Presenter(s)	Emma Gyasi and Robert Roe
Institution	Central Michigan University
Abstract	<p>In an increasingly competitive market for new students, admissions offices must learn to be more efficient and focus their limited resources in the most effective way. Through increased name buys and marketing, efforts have been made to increase the number of inquiries in hopes that they convert to applications and ultimately enrollment. However, conversion rates have dropped in recent years leading to significantly fewer applicants and new students. Last year we presented a predictive model designed to increase the conversion rate of inquiries to applications for the fall 2019 entering class. Here we will evaluate the outcomes of that model and present and evaluate the second stage model designed to convert more applications to enrolls.</p>

Open-Sourced IR: Zero-Cost Solutions for Data Management, Analytics, and Reporting

Presenter(s)	John Gonzalez with Noah Pollock
Institution	University of Michigan - Ann Arbor, Oakland University
Abstract	<p>Regardless of size or organizational resources, we all aim to minimize costs and maximize productivity. Unfortunately, those maxims are often at odds with each other. For example, enterprise ready software for analytics or reporting such as SPSS or Tableau can cost an IR office thousands to tens of thousands of dollars per year alone. However, free and open-source tools exist that are relied on and trusted by industry and government alike, and they are justifiable alternatives to paid and proprietary tools.</p> <p>In this interactive presentation, we provide a proof of concept that an IR office can eliminate software costs while continuing or improving functionality by relying exclusively on free and open-source software. We will demonstrate how multiple open-source tools can successfully integrate to host, manage, analyze, and report data. We also hope to convey that the learning curve is not insurmountable. We walk participants through a demo of the entire process which includes Linux (operating system to host data), MySQL Database (a DBMS to store and manage data), and R (to manage, analyze, and report data).</p>

Professional Development in Artificial Intelligence: A Beginner's Introduction to TensorFlow

Presenter(s)	Reuben Ternes
Institution	Oakland University
Abstract	<p>TensorFlow was developed by Google in 2017 as an open source solution for Machine Learning and Artificial Intelligence applications. In particular, it is designed as a rapid development platform for neural networks. This presentation will provide an overview of TensorFlow, how it works, and what it can do for Higher Education. This presentation is an absolute beginner's guide. No prior experience in neural networks, machine learning, or specific coding experience is required or expected.</p>

Presentation Session Descriptions - Alphabetical

Study of the Relationship Between Community College Transfer Pathway and Bachelor's Degree Completion: Importance of the Michigan Transfer Agreement

Presenter(s)	Roger Mourad and Lan Nguyen
Institution	Washtenaw Community College
Abstract	<p>This study explored the association between transfer pathway and bachelor degree completion. The dataset consisted of students entering WCC in Fall semesters 2006 to 2011 who transferred within six years (n = 3140). For this study, "transfer pathway" was defined as: transfer with MTA; transfer with MTA and Associate degree; transfer with degree; transfer without MTA or degree.</p> <p>Among first-time-in any college (FTIAC) students, transfers with MTA, and transfers with MTA and Associate degree, had significantly higher probability of earning a bachelor's degree than those without MTA or Associate degree. Among non-FTIACs, transfers with both MTA and degree had a significantly higher probability of bachelor degree completion. Other factors associated with bachelor degree completion were community college GPA, transfer time, and selectivity of transfer institution.</p>

The New Michigan Transfer Network

Presenter(s)	Erica Orians
Institution	Michigan Community College Association
Abstract	<p>Michigan launched the new Michigan Transfer Network at www.mitransfer.org. This session will provide a comprehensive overview of the new Michigan Transfer Network including the public site with information for students and the secure site where users have access to robust reports that will help institutions improve equivalency data and transfer information on the site. This will be especially valuable to institutional researchers. The presentation will also share marketing materials and other resources available to institutions.</p>

Understanding Student Transfer Behavior at Mid Michigan College Using Predictive Data Mining Techniques

Presenter(s)	Peter Velguth with Aaron Bauman, Jianping Chen, and MinJeoung Kim
Institution	Mid Michigan College, Central Michigan University
Abstract	<p>Transfer to a four-year college or university is a highly desirable goal for many community college students. Transfer prior to the end of a degree program may be detrimental to some students, and represents credit loss to the community college. We wanted to better understand students' path regarding transfer, and determine a predictive model. The goal was to determine the best intervention points to promote student understanding of the advantages to completing more credits and completed degrees at our school prior to transfer. Five years' worth of student demographic and course taking/ performance data, transcript request records, as well as National Clearinghouse transfer data were compiled for analysis, comprising 50 variables. Data were subjected to various techniques with SAS Enterprise Miner and R. Of the models used, decision tree minimized misclassification rates. Variables showing value in continued next page.</p>

Presentation Session Descriptions - Alphabetical

Understanding Student Transfer Behavior at Mid Michigan College Using Predictive Data Mining Techniques

Presenter(s)	Peter Velguth with Aaron Bauman, Jianping Chen, and MinJeoung Kim
Abstract	<p><i>Continued from last page....</i></p> <p>predicting transfer included MTA eligible math, cumulative GPA, whether they were ever a dual-enrolled student, among others. Discussion will also include our college's path to being able to conduct this type of analysis and institutional support for statistical approaches to understanding student behavior. A related study with a similar data set used to predict student retention will also be discussed.</p>

US News Ranking and Score Estimator

Presenter(s)	William McQuitty
Institution	Western Michigan University
Abstract	<p>U.S. News & World Report rankings release is one of the more important annual events for higher education institutions in America due to changes in rank giving the perception of gained or lost prestige. In 2017 Western Michigan University's Office of Institutional Research received a request from senior leadership to develop a tool that would allow him to understand which metrics affect the greatest or least amount of change on WMU's overall rank. The end result is the U.S. News Ranking and Score Estimator, a tool that gives us a deeper understanding of U.S. News' ranking methodology and how the scores of other institutions influence our rank as much as our own metrics. This tool can help institutions set targets that will positively affect the quality of their institution while also having a greater impact on their U.S. News Rank.</p>

Using Early Momentum Metrics to Predict First-year Student Retention and Six-year Degree Completion

Presenter(s)	Roger Mourad, Lan Nguyen, and Peilin Qiu
Institution	Washtenaw Community College
Abstract	<p>Retention and degree completion have long been a concern in postsecondary institutions. Recent published research provides evidence that early momentum metrics are leading indicators of retention and degree completion. This study analyzed the relationship of early momentum metrics on fall-to-winter retention, fall-to-fall retention, degree completion, and transfer of students who first enrolled at Washtenaw Community College in Fall 2010. Credit momentum indicators were the strongest predictors of first year retention, degree completion, and transfer. Among FTIAC students, completion of gateway English was a better predictor of retention, degree completion, and transfer than gateway Math completion. Persistence from fall-to-winter had a significant effect on fall-to-fall retention and was not significantly related to degree completion. Other important factors on retention, degree completion, and transfer included GPA and successful grades in developmental reading and writing in the first term. These findings are consistent with prior research and suggest that institutional efforts focused on early course success can improve retention, degree completion, and transfer.</p>

Presentation Session Descriptions - Alphabetical

Visualizing Student Enrollment, Demographic, & Outcome Data

Presenter(s)	Jacqui Broughton and Di Chen
Institution	Michigan State University
Abstract	<p>Like many institutions, MSU has been implementing various student success and learning initiatives with the goal of increasing persistence/retention rates, decreasing probation rates, raising the graduation rate, reducing time to degree, and closing gaps that exist within all these measures. In doing this, it is understood that various students have different experiences with the institution based on their demographics and identity. This has led to a need to have student data, particularly as it relates to race and ethnicity and various intersections within group, disaggregated to a more granular level (beyond IPEDS categories) as to assist in the development of more refined interventions to help promote student learning and success.</p> <p>To assist in these efforts, MSU's IR office designed an interactive dashboard that allows for visualizing enrollment and high-level outcome data by various student demographic characteristics, including a greater level of disaggregation of race/ethnicity data by various metrics. This session explores how this dashboard came into being, how data are organized and stored to allow for a finer level of detail of race/ethnicity data, the importance of thinking through how to display and interpret small numbers, and how various audiences throughout campus have engaged IR in dashboard design and development.</p>

What's in a Grade: Lessons Learned from Changing Grading Scales

Presenter(s)	Reuben Ternes, Song Yan, and Susanne Condron
Institution	Oakland University
Abstract	<p>Starting in Fall 2018, Oakland University moved to a completely new grading scale, moving from an entirely numerical scale to a commonly used letter grade system. This presentation details our research into the effects of this change, the impact on student GPA, and lessons learned about how faculty and student interpret and interact with new systems.</p>

Why Worry When Students Change Majors? What MSU Data Shows

Presenter(s)	Abram Huyser-Honig
Institution	Michigan State University
Abstract	<p>Seven in ten undergraduates change majors at least once during their time at MSU. How do graduation rates and time-to-degree for these students compare to students who don't change majors? Does when a student changes majors make a difference? Are there differences depending on the type of major a student changes from and to? In this session we will discuss findings from preliminary research into these topics based on MSU student data.</p>