

TO: Prospective Michigan Sports Analytics Society Members

FROM: Natalie Cieslak

SUBJECT: Michigan Sports Analytics Society Overview for Prospective Members

DATE: February 1, 2018

### **PURPOSE**

The purpose of this report is to inform prospective members about what the Michigan Sports Analytics Society (MSAS) is, what MSAS does, and how to join.

The information for this report was obtained from an interview with the president of MSAS, Rohit Mogalayapalli, on January 26, 2018. Additional information used was found in a posting about the Michigan Sports Analytics Symposium on the kines.umich.edu website.

### THE MICHIGAN SPORTS ANALYTICS SOCIETY AT THE UNIVERSITY OF MICHIGAN

The Michigan Sports Analytics Society at the University of Michigan (U of M) - Ann Arbor is a club focused on teaching interested students about sports analytics. This club was revived in the fall of 2016 when it was taken over by its current president, Rohit Mogalayapalli. Due to the fact that there is currently no academic program that focuses on sports analytics, MSAS is the next available option for students to learn about sports analytics.

MSAS currently consists of about 50 active members. To be considered an active member, one usually attends about half of the meetings, participates in a project, and comes to the larger club events. These members range from freshmen to seniors but the majority of the club is freshmen and sophomores. The majors of these members include sport management, business, the School of Information, statistics, and engineering (mostly computer science). MSAS has struggled with recruiting juniors and seniors because it is harder to involve them than it is to involve younger members.

# **How to Join the Michigan Sports Analytics Society**

To join MSAS one simply has to email the current president of MSAS, Rohit Mogalayapalli, at rohitmog@umich.edu asking to be added to the mailing list. There are no requirements to join,

just an interest in sports analytics. However, members do need to be self-motivated and spend the time it takes to learn sports analytic concepts if they want to fully get something out of being in MSAS. If members have conflicts with the weekly meeting time, Rohit is very flexible as he will meet with some of these members on a weekly basis to help them develop a plan on what concepts to learn and catch them up on the club's meeting that week.



#### The Michigan Sports Analytics Society Projects

At the moment, MSAS is working on a few different projects. Some of these projects are partnered with University of Michigan Athletics. MSAS has worked with various U of M sports teams, including the men's basketball team and the women's soccer team. Additionally, MSAS has been involved with projects that are partnered with the Michigan Performance Research Laboratory. Many of these projects involve wearable devices for athletes, such as products from Catapult Sports, an Australian-based sports analytics company. These projects each focus on different aspects of sport.

### MSAS projects include:

- Michigan Basketball Analytics Project
- Combining Data Science and Sports Science for Game Analysis
- Data Driven Storytelling: Using Wearables
- Web-scraped Data to Estimate Season Continuity and Injury Among NCAA Track and Field Teams

All of the MSAS projects are focused on learning. Older members manage the projects and teach younger members about what they are doing. Younger members then follow in the footsteps of these older members in the projects with the knowledge they have gained. One of the unique aspects about the MSAS is that students can request to get credit for the projects that they work on. This credit can be sponsored by Michigan Athletics or other clients that initially request the MSAS project.

MSAS also has small-side projects for club members to participate in. These side projects mostly involve creating optimal line ups for fantasy sports and the other analytics and implications brought on by fantasy sports.

# The Michigan Sports Analytics Symposium

The Michigan Sports Analytics Symposium took place from 6:00 – 8:00 PM on Thursday, January 18, 2018, in the Erlicher Room of North Quad. The event was open to anyone interested in learning more about sports analytics.

At the Michigan Sports Analytics Symposium, MSAS members shared details of the projects they were working on, and faculty members interested in sports analytics gave presentations about some of their work and interests. Other students also discussed two competitions for students to enter that involved sports analytics. Attendees also had the opportunity to mingle with each other and ask the student and faculty presenters questions about their projects. This

was a great opportunity for those interested in sports analytics to learn about how they can get involved in it at UofM.

The faculty and students that presented at the Michigan Sports Analytics Symposium included:

- Adam Rauh (Student, Data Science)
- Rohit Mogalayapalli (Student, Computer Science)
- Michael Lee (Student, Movement Science)
- Lew Porchiazzo (Head Strength & Conditioning Coach, Olympic Sports)
- Thomas Finholt (Dean and Professor, School of Information, University of Michigan)
- Jenna Wiens (Morris Wellman Assistant Professor of Computer Science and Engineering, University of Michigan)

Link to a video overview of the Michigan Sports Analytics Symposium:

https://www.youtube.com/watch?v=ryM4x\_Lr-bY&feature=youtu.be

# The Michigan Sports Analytics NFL Free Agency Value Prediction Challenge

The NFL Free Agency Value Prediction Competition is in partnership with the Baltimore Ravens, the Michigan Data Science Team, and the Michigan Sports Analytics Society. It will take place on Thursday, November 9, 2018, from 6:00 – 7:00 PM in the 10<sup>th</sup> Floor Auditorium of Weiser Hall.

Students will be able to organize into teams that will analyze historical free agent data in order to predict the value of the new contracts that are signed in the 2018 free agency period. While the real contracts are being signed, the student predictions will be evaluated against them for accuracy.

# The Benefits of Joining the Michigan Sports Analytics Society

The main benefit of joining MSAS is the knowledge members learn about sports analytics. Each meeting, a new concept that is important to analyzing data is taught to the members. Some of these concepts include various normalization techniques that are simple and powerful and different coding techniques that are very applicable for the real world. Most of the students

that join MSAS have a decent amount of background knowledge in sports so MSAS focuses less on teaching information about sports and spends more time on analytics and data.

Older members are another valuable component of MSAS as they provide a wealth of knowledge for younger members. These older members act as mentors for younger members and ease them into helping them with their projects.

MSAS members also a benefit from the unique experience MSAS provides. No other student organization on campus is quite like MSAS, and MSAS helps members to build a specialized set of skills and experiences that are useful in many aspects like their education and career.

# **CONCLUSION**

The Michigan Sports Analytics Society is a club at the University of Michigan that teaches its members about sports analytics. This club is the best option for students who are interested to learn about sports analytics as there is currently no academic program for sports analytics at U of M. MSAS mainly consists of projects, meetings, and larger events. It is open to anyone who wants to join and to join one must email the president at rohitmog@umich.edu.

The projects that MSAS is involved in are often partnered with Michigan Athletics or the Michigan Performance Research Lab and can receive academic credit. MSAS also hosted a Michigan Sports Analytics Symposium on January 18, 2018, and will be co-hosting the NFL Free Agency Value Prediction Challenge on November 9, 2018.

# References

University of Michigan School of Kinesiology. (2018, January 15). MSAS

Symposium. Retrieved January 31, 2018, from http://www.kines.umich.edu/news-events/events/msas-symposium