

### Center for Data Analytics and Sports Gaming (DASG)

(proposed name change: Center for Data Analytics and Sports Gaming Research (DASGR)

Presented by: Ali Emdad Associate Dean, Graves Business School September 27, 2022

#### Background

In March 2021, we submitted an amendment to HB940. In May 2021, the State of Maryland allocated Morgan State University \$1.5 M funding to establish the Center for Data Analytics and Sports Gaming Research.

The HB940 bill under the supplementary appropriation covers "Regulation of Fantasy Gaming Competitions and Implementation of Sports Wagering."

The funding for Morgan's Center allows for research collaboration and participation of faculty, staff, and students from several schools and units at Morgan in data analytics, eSports, leading-edge technologies, including NFTs (blockchain-based Non-Fungible Tokens), entrepreneurship, investment.

The Center leverages the on-campus expertise at other Morgan Centers, initiatives, Departments, etc. to accomplish its goals.

#### **Working Group Members**

July 2021-October 2021.

The group focused on Center's research areas. The Center's education mission is to build capacity in Data Analytics driven by research in eSports and sports gaming.

- 1. Dr. Ali Emdad (Associate Dean-Graves Business School-Organizer)
- 2. Dr. Anna McPhatter (Dean, Social Work)
- 3. Dr. Douglas Gwynn (Student Affairs, eSports)
- 4. Dr. Ed Scott (Athletics Director)
- 5. Dr. Gregory Ramsey (Information System-Business Analytics)
- 6. Dr. Jocelyn Turner-Musa (Psychology and Predictive Analytics)
- 7. Mr. Joseph Wells (Graves Business School-Entrepreneurship)
- 8. Dr. Justin Bonny (Psychology, Video Games, V.R.)
- 9. Dr. Kevin Banks (V.P. Students Affairs)
- 10. Dr. Kofi Nyarko (Engineering, Data Analytics)
- 11. Dr. Michael Sinclair (Social Work)
- 12. Dr. Miguel Zuniga (Graves Business School, Marketing)
- 13. Dr. Mohammad Tirmazi (Social Work)
- 14. Dr. Monir Sharker (Computer Science, Analytics, eSports)
- 15. Dr. Sanjay Bapna (Information Systems, Data Analytics and Visualization)
- 16. Mr. Tarrin Morgan (Students Affairs, eSports)
- 17. Mr. Tyrell Caine (Student Affairs, eSports)

### Vision

To be a leading Center for scholarly inquiry on the dimensions and impacts of sport gaming and eSports. To engage in innovative research, education, and cutting-edge insights into, laws, policy, and regulation. To be a recognized Center for research and learning opportunities in data analytics for students to ensure a diversified and skilled workforce. To be a recognized support Center for the underserved communities affected by problem gambling.

#### **Mission**

The Center conducts rigorous and impactful research that guides state stakeholders in the development of comprehensive policy and programs in sports gaming and eSports that improve the lives of individuals and the underserved communities. The Center, through collaborative pursuits and innovative programs builds research and education capacity of the University and offers learning opportunities to students at Morgan and Maryland's other HBCUs to improve skills and knowledge in data analytics.

# Strategic Group of Advisory Experts (SAGE)

**Charles Hurley** - Legal Counsel for FanDuel, the leader in sportsbook, fantasy, racing, casino space.

**Dylan Small** - Universal Furniture Professor; Professor of Statistics and Data Science; Department Chair; Wharton School, University of Pennsylvania

**Eric T. Bradlow** - K.P. Chao Professor, Professor of Marketing, Statistics, Education and Economics, Chairperson Wharton Marketing Department, and Vice-Dean of Analytics at the Wharton School of the University of Pennsylvania

Jeremy Babb - MSU Alum/Director of Technology & Educational Programming

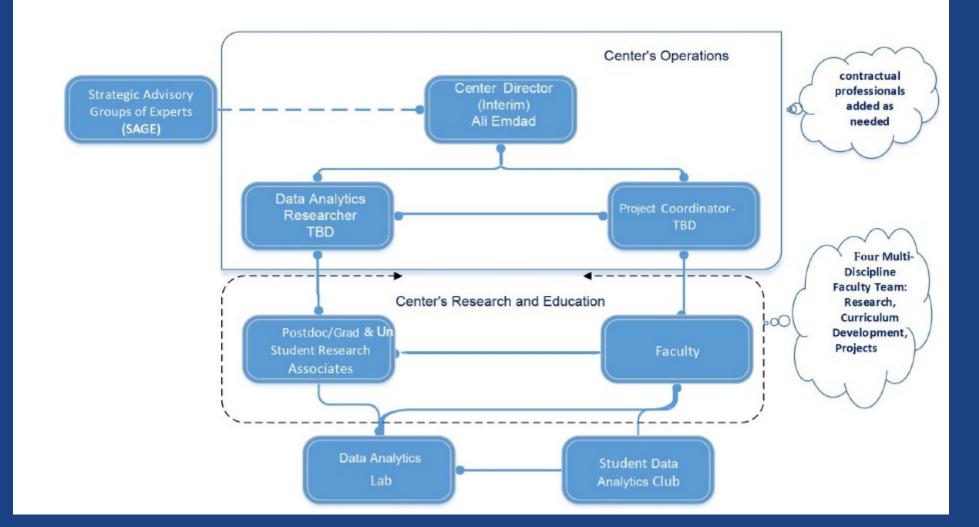
**Kevin Liles** – Co-founder of 300 Entertainment record label

Malcolm Coley - Chief Technology Officer & Founder for Futures First Gaming

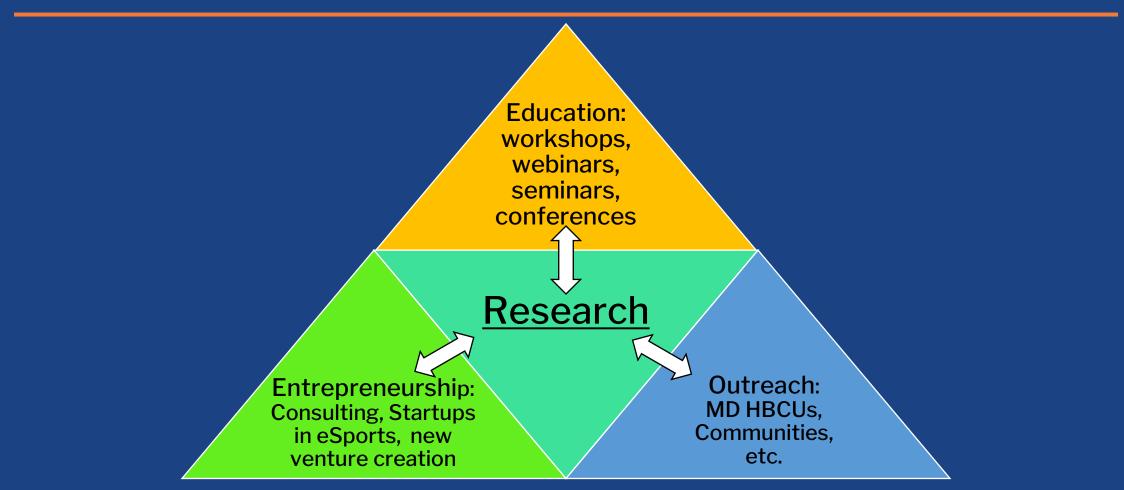
Ryan Johnson - CEO & Founder @ Cxmmunity Media & HBCU eSports League.

#### The Center for Data Analytics and Sports Gaming Research Morgan State University

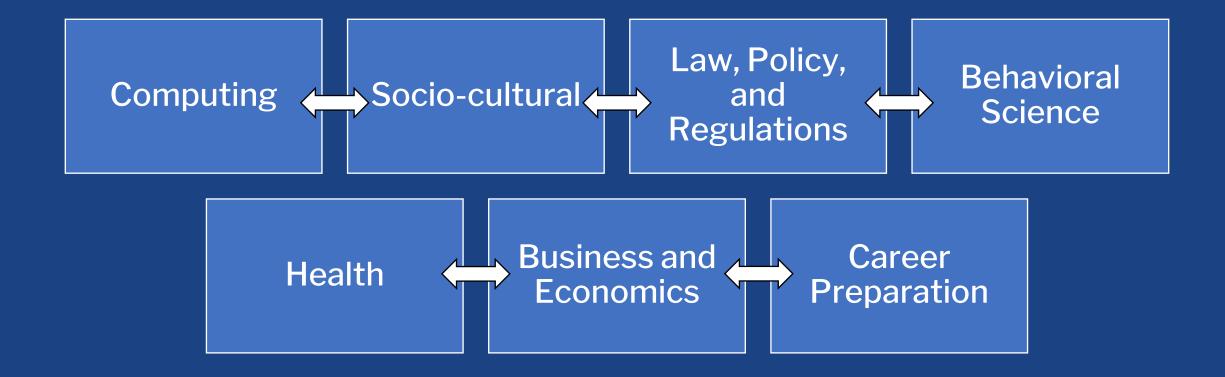
To conduct collaborative research, develop multi-discipline workshops, conferences, and other forums to expand knowledge; assist academic departments in developing and offering data analytics programs; prepare and engage students in Data Analytics research



### **Research Function The Center for DASG**



### **Research Areas** Collaborative & Interdisciplinary



# Computing

### **Capability**

- Collect, Clean, and analyze
- Predict the outcome of a sports match in real-time.

- What sensors and behavioral features are associated with sports match outcomes?
- How can multimodal datasets be visualized to display indicators of sports match outcomes?

### **Socio-Cultural**

### Capability

• Identify the social groups that are most likely to accept and engage in sports gaming and eSports.

- Are demographic and socioeconomic factors predictive of sports gaming and esports engagement?
- What cultural differences are present in the perception and acceptance of sports gaming and esports?

### **Policy and Regulations**

### Capability

 Forecast the impact of state and federal regulations on sports gaming and esports.

- What ethical and legal issues are involved in sports gaming and esports competitions?
- What aspects of sports gaming and esports are most susceptible to changes in regulations?

### **Behavioral Science**

### Capability

 Develop cognitive training to enhance decision-making of esports and sports gaming participants.

- What psychological traits predict player and team effectiveness during sports matches?
- What cognitive processes and decisions have the highest impact on real-time player performance?
- What biases are present in decisions made by sports bettors and do they differ for traditional and esports matches?
- How does toxic gameplay affect the decision making of esports players?

### Health

### Capability

 Identify individuals vulnerable to developing mental and physical ailments by engaging in sports gaming and eSports.

- What are the risk factors to developing problematic behaviors when engaging in sports gaming and eSports?
- How does the development of gambling addiction with sports gaming compare to traditional gambling?
- What interventions and protective factors make it less likely an individual will develop problematic behaviors with eSports and sports gaming?

### **Business and Economics**

### Capability

Identify opportunities to create ventures, improve operational performance, create innovations and determine impact of Gaming and eSports

### **Research Questions**

Dynamic pricing models in Gaming and eSports Tokenization and NFT in sports memorabilia Economic Impact of eSports, and gaming Economic and regulatory Incentives to start ventures Innovative monetization models for Gaming and eSports

### **Career Preparation**

### Capability

 Identify learning approaches for training students to become Data Analytics professionals to function in sports, sports analytics, and other DA industry sectors.

#### **Research Questions Examples**

- What knowledge and skill sets are predictive of eSports and sports gaming professional success?
- What curricula are best suited for the different career paths available for eSports and sports gaming?

## **CENTER'S SUSTAINABILITY**

#### **External Funding Sources**

Federal
<ul> <li>DoD</li> <li>NIH</li> <li>NSF</li> <li>CISA</li> </ul>

#### Private

- Foundations
- eSport companies
- Sports gaming companies
- Casinos

#### Mapping Research Areas and Potential Funding Sources

