

Data-Driven Athletics Internship

Internship Description and Student Application | Fall Semester 2026

126 HOURS	9 HOURS/WEEK	ACADEMIC CREDIT
Semester total	14-week average	EXSC 399R or CBE 498R

Opportunity Overview

The Data-Driven Engineering in Athletics internship is an interdisciplinary experience involving sports biomechanics, exercise science, engineering, artificial intelligence, video analysis, and community outreach. The program is a collaboration involving BYU Engineering, Intermountain Health, Utah Jazz Youth, and coaching staffs throughout Utah.

The Outreach Coordinator supports AI-assisted form and biomechanical analysis for running and basketball. The intern coordinates with adult coaches and project partners, receives authorized videos from Application Engineers or other approved representatives, processes the videos through approved analysis tools, reviews output quality, and prepares coaching reports and presentations.

Important scope boundary

Interns do not record, coach, supervise, assess, transport, or communicate directly with minor athletes. Authorized Application Engineers, coaches, healthcare professionals, or partner representatives conduct all athlete-facing work and video collection.

What the Intern Will Learn

- How pose estimation, computer vision, and AI are applied to sports biomechanics.
- How to evaluate video quality and prepare authorized files for quantitative movement analysis.
- How anatomy, biomechanics, and performance concepts inform running and basketball analysis.
- How to recognize the capabilities, uncertainty, and limitations of AI-generated measurements.
- How to translate technical findings into clear observations for adult coaches and program partners.
- How to coordinate outreach workflows while protecting athlete privacy and maintaining accurate records.

Internship Responsibilities

1. Adult Coach and Partner Coordination

- Communicate professionally with adult coaches, BYU personnel, Intermountain Health collaborators, Utah Jazz Youth representatives, and authorized host-site contacts.
- Help schedule approximately one outreach visit or video-collection session each week, as partner schedules permit. Application Engineers or approved representatives execute the visit and collect the videos.
- Confirm schedules, adult points of contact, roster formats, analysis objectives, equipment needs, and secure file-delivery procedures.
- Prepare logistical materials for the Application Engineers, including roster templates, athlete-identification systems, and data-gathering instructions.
- Schedule follow-up presentations with adult coaches and authorized representatives.

2. Video Intake and Processing

- Receive authorized videos from Application Engineers or designated partner representatives through approved project channels.
- Organize, label, and associate videos with the correct approved athlete identifiers.
- Review video quality, camera position, completeness, frame rate, and compatibility with the analysis applications.
- Process videos with AI-assisted form and biomechanical-analysis tools.
- Document files that cannot be analyzed reliably and request replacement or supplemental footage through the Application Engineer team.
- Maintain accurate intake, processing, quality-control, and delivery records.

3. Analysis and Reporting

- Review AI-generated measurements for technical plausibility and identify possible errors or limitations.
- Prepare video overlays, analysis summaries, and coaching presentations.
- Work with Application Engineers and domain-team leads to verify results before external delivery.
- Support presentations to adult coaches and authorized partner representatives.
- Gather adult-coach feedback and translate it into organized feature requests for the Application Engineer and Software Developer teams.

4. Team Participation

- Attend required Tuesday and Thursday meetings at 10:00 a.m. in CB 396.
- Submit an accurate timesheet by Friday of each week.
- Close assigned action items before the following Tuesday meeting.
- Participate in application testing, quality assurance, progress presentations, and the final stakeholder presentation.
- Promptly report technical problems, data-quality concerns, privacy issues, or unauthorized files.

Activities Outside the Internship Scope

The Outreach Coordinator will not:

- Record or photograph minor athletes.
- Coach, supervise, interview, assess, transport, or communicate individually with minors.
- Request permission directly from a minor or the minor's parent or guardian.
- Deliver individual findings or coaching recommendations directly to a minor athlete.
- Provide medical diagnoses, treatment recommendations, clinical advice, or guarantees of performance improvement.

Time Commitment and Team Rhythm

The internship requires 126 total hours. The normal expectation is nine hours per week for 14 weeks. Weekly hours may vary between five and 20 with supervisor approval, but the Student must complete the full semester total required for the approved academic credit.

Weekly activity	Estimated time
Tuesday and Thursday team meetings	2 hours
Communication with adult coaches and partners	1–2 hours
Video intake, organization, and quality review	1–2 hours
Video processing and analysis review	3 hours
Reports, presentations, feature requests, and documentation	1–2 hours
Typical weekly total	Approximately 9 hours

Fall 2026 Milestones

Date	Day	Milestone
September 8	Tuesday	Day One — orientation and first team meeting
September 10	Thursday	Initial analysis workflow session
October 8	Thursday	Team progress presentation #1
November 12	Thursday	Team progress presentation #2
December 3	Thursday	Team progress presentation #3
Week of December 7	Mon–Fri	Final presentation to stakeholders

Supervision and Team Organization

Team Manager	McGyver Clark
Faculty Supervisor	John Hedengren
Software Developers	McGyver Clark, Chris Kuchin, Aaron Thayer
Track / Cross-Country Lead	Heather Thayer
Track / Cross-Country Members	Nathan Brimhall, Scott Jezik
Basketball Lead	Bradley Greenbaugh
Basketball Members	Bryce Greenbaugh, Ava Peacock
Outreach Coordinator	Internship position described in this document

Qualifications and Selection

Required

- Current BYU student eligible to enroll in EXSC 399R or CBE 498R, subject to departmental approval.
- Availability for both Tuesday and Thursday team meetings at 10:00 a.m. in CB 396.
- Ability to complete 126 documented hours during Fall Semester 2026.
- Strong organization, reliability, written communication, and attention to detail.
- Willingness to learn new video-processing, AI-analysis, and data-management tools.
- Ability to protect confidential athlete information and follow approved file-handling procedures.

Preferred

- Coursework or experience in exercise science, biomechanics, engineering, data science, computer science, athletic training, coaching, communication, or a related area.
- Familiarity with running, basketball, movement analysis, video editing, or sports performance.
- Experience communicating with coaches, educators, healthcare professionals, or community partners.
- Comfort working with spreadsheets, shared drives, video files, and structured naming conventions.

Academic Credit and Approval

The internship may be completed through EXSC 399R or CBE 498R with advance approval from the appropriate department. EXSC 399R currently uses 42 internship hours per credit; 126 hours corresponds to three credits, subject to program requirements and approval.

Before hours may be counted, the Student must complete all required BYU internship steps, including verification of an Internship Master Agreement when applicable, approval of the IRAMS application, course registration, and completion of assigned academic work. Academic credit and grades are determined solely by BYU.

Compensation

This is anticipated to be an unpaid educational internship. Students who successfully complete the internship are considered for a paid student position.

Privacy, Data Security, and Responsible AI Use

- Process only videos received through an approved project channel after the collecting organization has confirmed the required authorization.
- Use approved athlete identifiers whenever practical and access only the files necessary for assigned duties.
- Use only approved devices, accounts, applications, and storage systems; do not place athlete files in personal email, messaging, social-media, or cloud-storage accounts.
- Report missing permissions, mistaken disclosures, lost files, or suspected unauthorized access immediately.
- Do not reuse videos for marketing, public demonstrations, research, publication, commercial development, or AI model training without separate authorization and applicable institutional approval.
- Treat AI-generated measurements as estimates requiring human review. Outputs are educational coaching information, not medical findings or diagnoses.

The internship does not include access to Intermountain Health patient records or protected health information unless separately authorized in writing and supported by all required agreements and training.

PART II

STUDENT APPLICATION

Outreach Coordinator Internship | Fall Semester 2026

Application checklist

Submit this completed application with a current résumé. Do not include private athlete information or work samples containing identifiable athlete videos or data.

A. Applicant Information

Full legal name	
Preferred name	
BYU Net ID	
BYU ID number	
BYU email	
Phone	

B. Academic Information

Major	
Minor / emphasis	
Expected graduation	
Current academic year	☐ First year ☐ Sophomore ☐ Junior ☐ Senior ☐ Graduate
Overall GPA	
Faculty advisor	

C. Availability and Commitment

- ☐ I can attend Tuesdays at 10:00 a.m. in CB 396.
- ☐ I can attend Thursdays at 10:00 a.m. in CB 396.
- ☐ I can complete 126 hours during the semester.
- ☐ I understand that weekly hours may vary with project needs.

Other recurring conflicts

Typical weekly availability

D. Relevant Background

Check all areas in which you have coursework, experience, or a strong interest:

- | | |
|--|--|
| ☐ Exercise science | ☐ Biomechanics / kinesiology |
| ☐ Engineering | ☐ Data science / statistics |
| ☐ Artificial intelligence | ☐ Computer vision / pose estimation |
| ☐ Video editing | ☐ File and data management |
| ☐ Running / track / cross-country | ☐ Basketball |
| ☐ Coaching or sports performance | ☐ Professional outreach |
| ☐ Healthcare collaboration | ☐ Technical writing / presentations |

Technical Tools

List software, video, analytics, programming, design, or collaboration tools you have used.

Tools and level of experience

E. Short Responses

1. Why are you interested in the Data-Driven Engineering in Athletics internship?

2. What do you hope to learn or accomplish during the semester?

3. Describe an experience that demonstrates your organization, reliability, or attention to detail.

4. Describe any experience you have communicating technical information to a nontechnical audience.