

INFORMED CONSENT FORM

Research Study: Cloud-Agnostic Container Processing Pipeline for KinaTrax

User Experience Evaluation and System Performance Validation

Principal Investigator, Affiliation and Contact Information

Principal Investigator: Peter Winkler

Affiliation: Computer Science Master's Program (CSMS), Full Sail University

Email: pwinkler13@students.fullsail.edu

Phone: (814) 516-2987

Faculty Advisor: Dr. Andreas Marpaung, Full Sail University

Institutional Contact

Institutional Review Board

Full Sail University

Office of Research and IRB

Email: irb@fullsail.edu

1 Introduction and Purpose of the Study

You are invited to participate in a research study evaluating a new cloud-based system for analyzing biomechanical data in professional baseball. This study is being conducted as part of a Computer Science Master's capstone project at Full Sail University.

What is this study about?

Currently, analyzing game footage for biomechanical insights takes over 12 hours because videos are processed one at a time. We have developed a new system that uses cloud computing to process all videos at the same time, reducing the wait from 12 hours to about 5 minutes. This study will test whether users find this new system easy to use and whether it maintains the same accuracy as the current system.

Why are we doing this research?

We want to understand:

- How users experience waiting for processing results (Do real-time progress updates make the wait feel shorter?)

- Whether users understand trade-offs between processing speed and accuracy
- Which notification method (email or text message) helps users review results fastest
- Overall user satisfaction with the new system

2 Description of the Research

What will I be asked to do if I participate?

Your participation will involve **one or more** of the following activities, depending on which study component(s) you are assigned to:

Option 1: Dashboard Evaluation (30 minutes, via Zoom)

- You will submit a processing request for a sample baseball game
- You will see either a basic “Processing...” message or a detailed dashboard showing real-time progress
- You will complete a short survey about your experience (5–10 minutes)
- You may be asked follow-up questions about what you liked or would improve

Option 2: Priority Interface Usability Test (45 minutes, via Zoom)

- We will show you an interface where you choose how fast you want results (Rush/Standard/Economy)
- We will give you two scenarios and ask you to explain which priority you would choose and why
- You will complete a usability survey about how easy the interface was to understand
- You will be asked to “think aloud” while making decisions so we can understand your reasoning

Option 3: Notification System Field Study (4 weeks, minimal time)

- You will use the system to process 2–3 games over 4 weeks
- You will receive email notifications (or email + text messages) when results are ready
- The system will track how long it takes you to view results after we notify you
- At the end of 4 weeks, you will complete a short online survey about your notification preferences (10 minutes)

Option 4: Overall Satisfaction Survey (10 minutes, online)

- After participating in any of the above activities, you will complete a final survey about your overall experience with the system
- The survey includes questions about usability, satisfaction, and suggestions for improvement

Will I be recorded?

- Zoom sessions may be recorded (video and audio) for transcription purposes only
- Recordings will NOT be shared publicly or used in presentations
- Recordings will be destroyed after transcription

- You can choose to participate WITHOUT being recorded (we will take notes instead)

3 Subject Participation

Who can participate?

We are looking for approximately **30 participants** who meet the following criteria:

- You are **18 years of age or older**
- You work professionally in sports analytics, coaching, or technical support for sports systems
- You have familiarity with biomechanical analysis systems (helpful but not required)
- You can participate remotely via Zoom video conference
- You can read and understand English

How much time will this take?

Depending on which study component(s) you participate in:

- **Dashboard Evaluation:** One 30-minute Zoom session
- **Usability Test:** One 45-minute Zoom session
- **Field Study:** 2–3 processing requests over 4 weeks (minimal time) + 10-minute final survey
- **Overall Survey:** 10 minutes (online, at your convenience)

Total maximum time commitment: Approximately 60–90 minutes across all activities

4 Potential Risks and Discomforts

This research involves **minimal risk** – no more than you would experience in everyday use of computer software.

Possible minor discomforts:

1. **Screen fatigue** from extended computer use during Zoom sessions

How we minimize this: Sessions are limited to 60 minutes maximum; we will offer breaks every 20 minutes

2. **Time commitment** for participating in the study

How we minimize this: Sessions are scheduled at your convenience; you can reschedule without penalty

3. **Privacy concerns** about sharing professional opinions

How we address this: All responses are anonymized; your employer will not be identified; only aggregated results will be reported

4. **Technical issues** with Zoom or internet connectivity

How we address this: Backup phone call option available; you can reschedule at any time

5. Professional judgment concerns – feeling like your expertise is being evaluated

How we address this: We are testing the SYSTEM, not YOU; there are no wrong answers; your feedback helps us improve the design

What if I feel uncomfortable?

- You can pause or stop any session at any time without explanation or penalty
- You can skip any question or task you don't want to complete
- You can contact the Full Sail IRB if you have concerns about the study (contact information at top of form)

Known Risks:

There are no known risks beyond normal everyday computer use. If you experience any unexpected issues, please contact the principal investigator immediately.

5 Potential Benefits

Benefits to You

- **Early access** to cutting-edge sports analytics technology
- **Professional contribution** – your feedback will shape tools used by coaches and analysts
- **Learning opportunity** – exposure to cloud computing and biomechanical analysis innovations
- **Potential workflow improvement** – if this system is adopted, you may benefit from faster analysis (12 hours → 5 minutes)

Benefits to the Sports Analytics Field

- **Improved system design** based on real user feedback
- **Evidence-based best practices** for asynchronous processing user interfaces
- **Advancement of cloud computing** applications in sports analytics
- **Academic publication** contributing to HCI and Data Science knowledge

Benefits to Society

- **Athlete safety** – faster biomechanical analysis can identify injury risks sooner
- **Better coaching** – same-day post-game review enables next-day training adjustments
- **Sports technology advancement** – pushing the boundaries of real-time analytics

Important: We cannot guarantee that you will personally benefit from participating in this study.

6 Confidentiality

How will my information be protected?

Your identity will be kept confidential. Here's how:

1. **Participant IDs:** You will be assigned a random ID number (e.g., P001, P002). This ID will be used on all research data instead of your name.
2. **Separate Storage:**
 - Your signed consent form (with your name) will be stored in a separate encrypted folder from research data
 - Only the principal investigator and faculty advisor will have access to the file linking IDs to names
3. **Anonymized Data:**
 - Survey responses will use your participant ID only
 - System logs will be anonymized (no names, emails, or employer information)
 - When we report results, we will use phrases like “75% of participants agreed...” – never “John Smith from Company X said...”
4. **No Identifying Information in Publications:**
 - Your name will NOT appear in the capstone thesis, academic papers, or presentations
 - Your employer will NOT be identified
 - We will NOT use direct quotes with your name attached

What about Zoom recordings?

If you consent to being recorded:

- **Video and audio recordings** will be used only for transcription of usability sessions
- Recordings will be stored in an encrypted folder on a password-protected computer
- Recordings will NOT be shared publicly or used in presentations
- **Recordings will be destroyed** after transcription is completed (within 30 days of session)

If you do NOT want to be recorded, you can still participate – the researcher will take written notes instead.

How long will you keep my data?

- **Research data** (surveys, system logs, transcripts): **5 years** after study completion (academic standard)
- **Consent forms:** **5 years** (stored separately from research data)
- **After 5 years:** All data will be securely destroyed
 - Digital files permanently deleted

- Physical documents shredded
- Recordings already destroyed after transcription

Who will see my data?

- **During the study:** Only the principal investigator (Peter Winkler) and faculty advisor
- **In publications:** Only aggregated, anonymized results (e.g., “Average satisfaction score was 4.2/5”)
- **Never:** Your individual responses linked to your name

7 Authorization for Use of Information

By signing this form, you authorize the use of your anonymized responses for the following purposes:

- **Education:** Capstone thesis for Full Sail University Computer Science Master’s program
- **Publication:** Potential academic conference papers or journal articles
- **Presentation:** Potential presentations at academic or industry conferences
- **Research:** Analysis of user experience and system performance

Important: Your name and identifying information will NOT be used in any of these materials. Only anonymized, aggregated findings will be shared.

8 Compensation

Will I be paid for participating?

No, there is no monetary compensation for participating in this study.

Participation is voluntary and motivated by:

- Professional interest in advancing sports analytics technology
- Opportunity to influence the design of tools you may use in your work
- Contribution to academic research
- Early access to innovative cloud-based processing system

9 Voluntary Participation

Do I have to participate?

No. Your participation is completely voluntary. You are free to:

- Decline to participate with no consequences
- Withdraw from the study at any time without explanation
- Skip any questions or tasks you don’t want to complete

Your decision will NOT affect:

- Your professional relationships with the researcher or Full Sail University
- Your access to future versions of the KinaTrax system
- Any services, care, or benefits you are entitled to

10 Withdrawal from the Study

Can I change my mind after I agree?

Yes. You may withdraw from this study at any time for any reason without penalty. To withdraw:

1. **Contact the principal investigator** (Peter Winkler) via email or phone (contact information at top of form)
2. **State your desire to withdraw** – no explanation required
3. **What happens to my data:**

- If you withdraw **before** we collect data from you, no data will be used
- If you withdraw **after** we collect data, you can choose:
 - **Option A:** Request that your data be destroyed and not included in the study
 - **Option B:** Allow already-collected data to be used (it's already anonymized, so withdrawal won't be linked to you)

Note: Once data is anonymized and aggregated, it may be difficult to remove your specific responses, but we will make every effort to comply with your wishes.

11 Costs and Reimbursements

Will there be any costs to me?

No. There is no cost to participate in this study. You will not be charged for:

- Materials or supplies
- Software access
- Zoom video conference platform
- Processing requests you submit during the field study

Will I be reimbursed for anything?

- **Internet/Phone Costs:** Not reimbursed (standard usage for remote work)
- **Transportation:** Not applicable (study is conducted remotely)
- **Time:** Not reimbursed (voluntary participation)

12 Questions and Contact Information

Who can I contact if I have questions?

About the Study:

- **Principal Investigator:** Peter Winkler
- **Email:** pwinkler13@students.fullsail.edu
- **Phone:** (814) 516-2987

About Your Rights as a Research Participant:

- **Full Sail University Institutional Review Board (IRB)**
- **Email:** irb@fullsail.edu
- **Office:** Office of Research and IRB, Full Sail University

If you experience any problems or concerns during the study, please contact the principal investigator immediately.

13 Statement of Consent

I have read this consent form (or it has been read to me). I have had the opportunity to ask questions about the research study, and my questions have been answered to my satisfaction.

By signing below, I agree that:

- I am 18 years of age or older
- I understand the purpose of this research study
- I understand what I will be asked to do if I participate
- I understand the potential risks and benefits
- I understand that my participation is voluntary
- I understand that I can withdraw at any time without penalty
- I understand how my confidentiality will be protected
- I agree to have my responses used for academic research, education, and potential publication (anonymized)

Do you consent to participate in this research study?

Yes, I agree to participate

No, I do not wish to participate

Recording Consent (Optional)

Zoom sessions may be recorded for transcription purposes only. Recordings will be destroyed after transcription. **Do you consent to being video/audio recorded?**

Yes, I consent to being recorded

No, I do not consent to being recorded (I understand the researcher will take written notes instead)

Signatures**Participant**

Name of Participant (print): _____

Signature: _____

Date: _____

Person Obtaining Consent

Name: Peter Winkler, Principal Investigator

Signature: _____

Date: _____

Witness (if applicable)

Name of Witness (print): _____

Signature: _____

Date: _____

Important Notes

1. You will receive a signed copy of this consent form for your records.
2. The principal investigator will keep the original signed form for at least 5 years after the study ends.

3. This consent form has been approved by the Full Sail University Institutional Review Board (IRB).
-

FOR IRB USE ONLY

IRB Approval Date: _____

IRB Approval Number: _____

Expiration Date: _____

END OF INFORMED CONSENT FORM

PARTICIPANT COPY – Please keep this for your records