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Wie kommen wir hinterher?

27. März 2025

Dr. Janina Krieger

Books Publishing Solutions

SPRINGER NATURE GROUP

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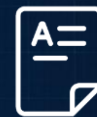
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Publishing
482,000
articles



50%
of articles published OA



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Data 2024

SPRINGER NATURE

Unsere Motivation: “We help with global challenges”

Als Wissenschaftsverlag können wir dazu beitragen ...

- Forschung **schneller** zu veröffentlichen
- Forschung für **jeden zugänglich** & verständlich zu machen
- Forschung schneller **in die Anwendung** zu bringen
- **Grenzen aufzubrechen** – regional wie fachspezifisch
- **Interdisziplinarität** zu fördern





Kann uns KI dabei helfen?

“We help with global challenges”

KI hilft uns, Wissenschaft schneller, zugänglicher und vertrauenswürdiger zu machen

Need for Speed

Wir beschleunigen Forschung

- Nature Research Intelligence
- Artikelverarbeitung der nächsten Generation
- Textgenerierung und Schreibhilfe

Breaking Barriers

Wir fördern Teilhabe

- Textzusammenfassungen & Research Round-Ups
- KI-gestützte Übersetzungen
- Reproduzierbare Methoden entwickeln und teilen (Open Science)

Maintaining trust in science

Wir schaffen Vertrauen

- Erkennung von fehlerhaften, maschinell erstellten Texten
- Identitätsüberprüfung von Autor*innen & Peer Reviewern zur Vermeidung von Interessenskonflikten
- Schutz der Bildintegrität

Wir gehen verantwortungsvoll mit KI um

TEAMS



Aufbau dedizierter KI-Teams und -Schulungen, damit im gesamten Unternehmen die Chancen genutzt werden können

PARTNERSCHAFTEN



Zusammenarbeit mit weltweit renommierten Technologieunternehmen und erfahrenen Lieferanten

ETHIK



Fünf Grundsätze, die Würde, Respekt, Schadensminimierung, Fairness, Transparenz, Verantwortlichkeit, Datenschutz und Datenverwaltung zur Steuerung von KI-Initiativen abdecken

INNOVATION



Umsetzung unserer KI-Grundsätze über Entscheidungsforen mit klarem Umfang und Mandat

Drei Anwendungsfelder von generativer KI in Verlagen



>> Insgesamt mehr als 65 KI-Projekte, spezialisiert auf wissenschaftliche Anwendung

Unsere Gemeinsamkeiten

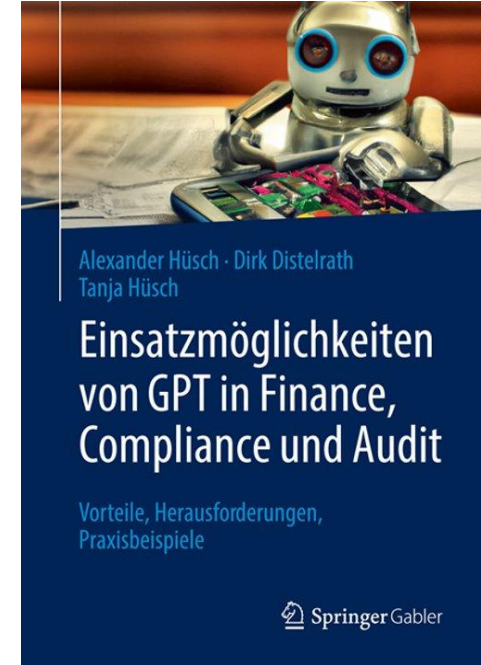
Was interessiert euch? Was verbindet uns?

1. KEINE ZEIT: zum Lesen & zum Schreiben
2. Information Overload
3. FOMO! Angst davor, wichtige Publikationen zu verpassen
4. Sprachbarrieren
5. Zu wenig interdisziplinäres Engagement

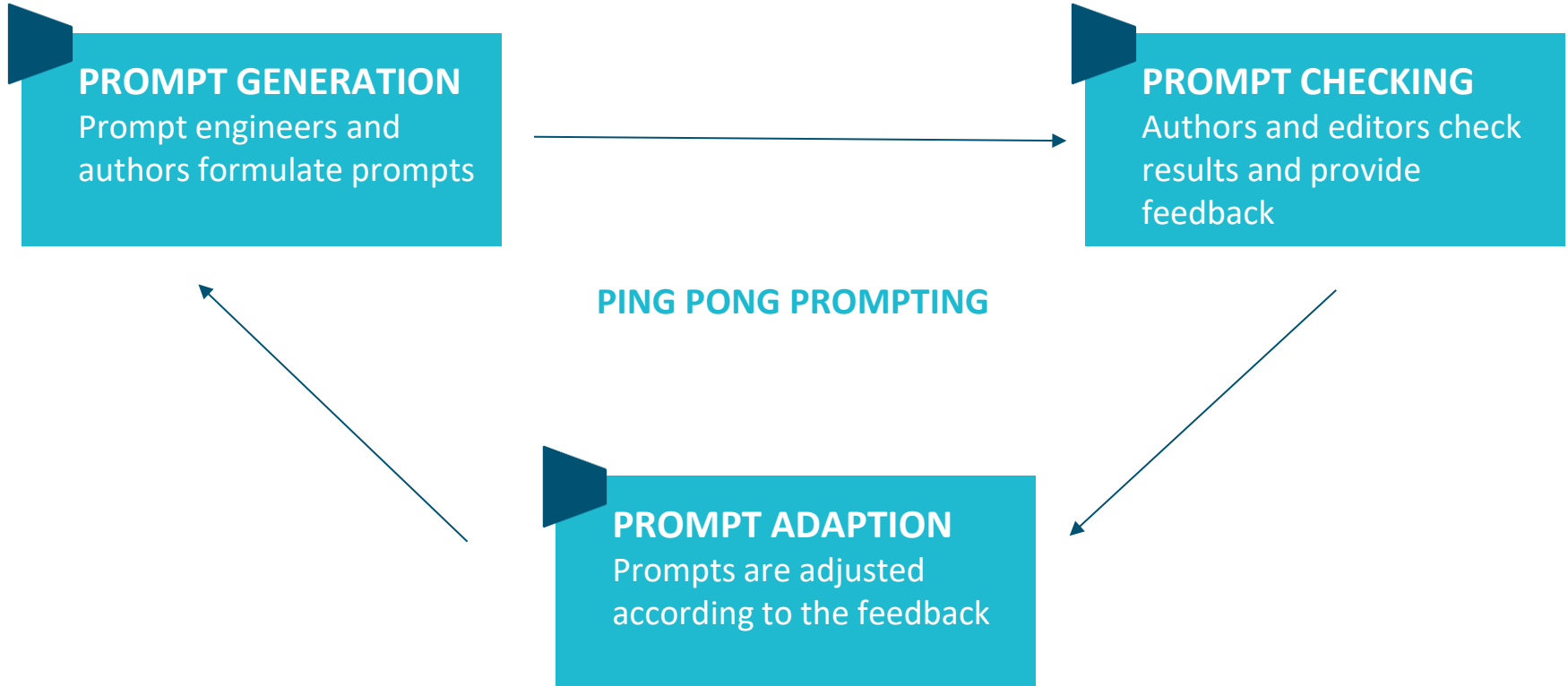
Das Problem der Zeit!

Der AI Book Designer

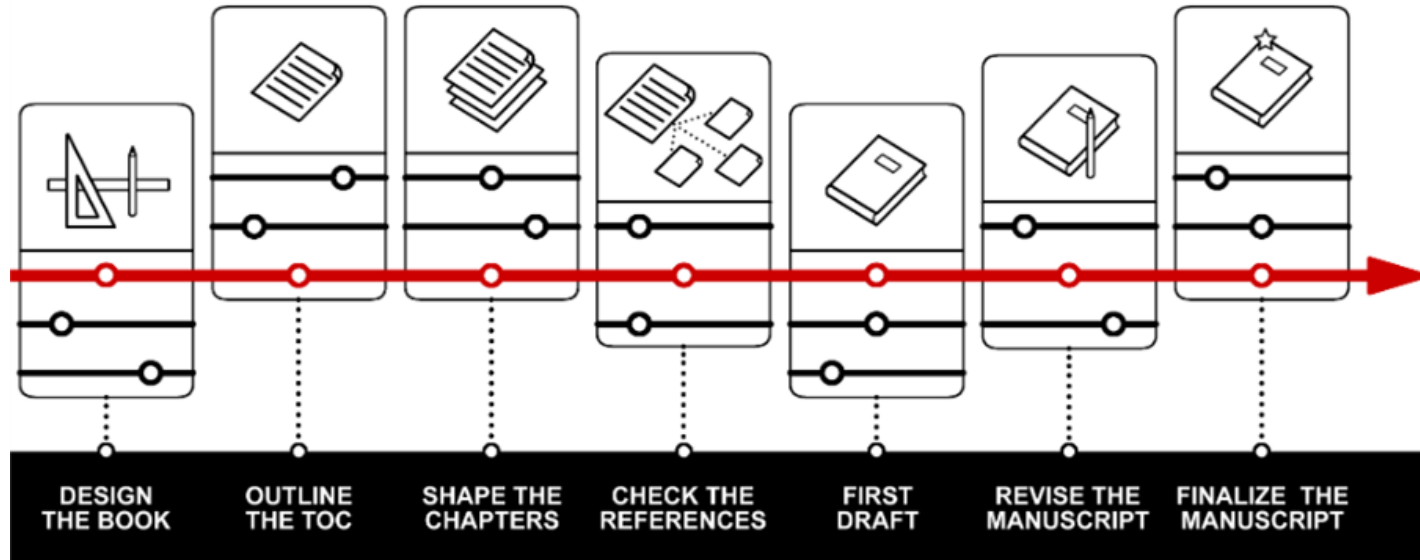
- ...ist eine KI-gestützte Plattform, die Autor:innen nahtlos Schritt für Schritt vom Buchvorschlag bis zum veröffentlichbaren Manuskript führt.
- Wir haben den Buchentstehungsprozess definiert, in Prompts umgewandelt und einen Prototypen entwickelt, der Autor:innen während der gesamten Manuskripterstellung unterstützt.
- Wir haben unsere ersten drei Bücher damit veröffentlicht.
Rechts: **Das erste akademische Buch mit generativer KI.**
- Derzeit entwickeln wir die vollständig automatisierte KI-Softwarelösung.
- Das Tool kann auf andere Produkttypen angepasst werden, denn jede Publikationsform folgt einer gewissen Struktur.




Der AI Book Designer



AI Book Designer: Der Prozess



Schritt 1: “Design the Book”



Design the book**Outline the ToC****Shape the chapters****Check the references****First draft**

linguistics, political science, and further social sciences who want to get an overview of the relevant state of the art in the other related disciplines and understand and tackle the issue of bias from a more effective, interdisciplinary viewpoint.

Provide an estimation of the total number of chapters of the book:


7

Provide three unique selling points of the book:

Offers a comprehensive interdisciplinary approach to identifying and analyzing media bias.

Introduces person-oriented framing analysis to reveal bias in news articles.

Schritt 2: “Outline the Table of Contents”



Design the bookOutline the ToCShape the chaptersCheck the referencesFirst draft

The total number of chapters is: 7.
Provide a title for each chapter.

All subchapters have following structure:

- X.1: Summary
- X.2: Subchapter X.2
- X.3: Subchapter X.3
- X.4: References

The final chapter will be the conclusion:

- Conclusion

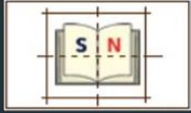
Provide a title for each subchapter.

This is the Table of Content of your book in English:

<|end-of-prompt|>

Generate ToCShow ToC

Schritt 3: “Shape the Chapters”



Design the book

Outline the ToC

Shape the chapters


Check the references

First draft

This is the GPT-generated enhanced Table of Content, which you can edit if you like:

- A brief biography of the author, highlighting their academic and professional background
 - The author's scholarly interests and expertise that led to the development of the book
 - A summary of the author's previous publications and achievements
 - Information about the author's current research projects and affiliations
 - A note on the author's dedication to the interdisciplinarity of media bias research
- Introduction: Setting the Stage for Media Bias Analysis
- An in-depth introduction to the topic of media bias and its importance
 - Explanation of the book's interdisciplinary approach, combining computer science, computational linguistics, and political science
 - Brief introduction to the concept of person-oriented framing analysis
 - An outline of the book's structure, summarizing each chapter
 - The purpose and goals of the book
 - A discussion on the intended audience and how the book could be used in research
- Chapter 1: Understanding Media Bias
- An overview of the concept of media bias, its types, and manifestations
 - A detailed look into the historical context and evolution of media bias
 - An exploration of various theoretical frameworks used to understand and study media bias

Schritt 4: “Check the References”



innovation management ×
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FILTERS

FAVORITES

➤ PUBLICATION YEAR

➤ RESEARCHER

➤ RESEARCH CATEGORIES

➤ PUBLICATION TYPE

➤ SOURCE TITLE

➤ JOURNAL LIST

➤ OPEN ACCESS

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PUBLICATIONS
4,446,070

DATASETS
1,658

GRANTS
42,923

PATENTS
321,324

CLINICAL TRIALS
1,738


POLICY DOCUMENTS
145,894


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Sort by: Relevance ▾


Title, Author(s), Bibliographic reference - [About the metrics](#)

Knowledge management process, knowledge based innovation: Does academic researcher's productivity mediate during the pandemic of covid-19?
Fazal ur Rehman, Hishamuddin Ismail, Basheer M. Al Ghazali, Muhammad Mujtaba Asad, Muham...
2021, PLOS ONE - Article
Drucker's knowledge-worker productivity theory and knowledge-based view of the firm theory are widely employed in many disciplines but there is little application of these theories in knowledge-b...
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 **Citations** 9


 **Altmetric** 11


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Advances in the innovation of management: a bibliometric review
Xiya Lin, Samuel Ribeiro-Navarrete, Xiaohui Chen, Bing Xu
2023, Review of Managerial Science - Article
As the production model transforms from industrial manufacturing to a knowledge-based economy, management innovation becomes a s...
[more](#)

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< ANALYTICAL VIEWS

 **RESEARCH CATEGORIES** ▾


35 Commerce, Management, Tourism an... 828,803

46 Information and Computing Sciences 636,141

40 Engineering 506,306

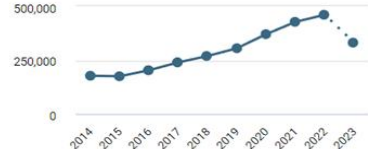
44 Human Society 504,248

32 Biomedical and Clinical Sciences 473,9...


 **OVERVIEW**

Citations
70.1 M

Citations (Mean)
15.77



Year	Publications (total)
2014	150,000
2015	160,000
2016	180,000
2017	200,000
2018	220,000
2019	250,000
2020	280,000
2021	320,000
2022	350,000
2023	380,000

 Publications (total)

[Give feedback](#)

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Schritt 5: “First Draft”



Design the book

Outline the ToC

Shape the
chapters

Check the
references

First draft

First draft of the book

Edit the GPT prompt for generating the first draft of a specific book section:

Chapter 2: Navigating the New Media Landscape

This chapter delves into the realm of new media, tracing its evolution and its significant role in current news dissemination models. This is paired with a thorough illumination of complicated issues in identifying bias within these platforms and a comprehensive exploration of the roles artificial intelligence (AI) algorithms play in moulding news content and potentially propagating bias. A detailed review of the existing studies scrutinizing media bias in the contemporary media landscape cements the chapter's core insights. New media represents an evolutionary shift in information dissemination. The influence of traditional print and broadcast media has been significantly disrupted by the advent of digital platforms, fuelled by advancements in internet infrastructure and seismic changes in consumer behaviours towards on-demand content consumption. Notably, the real-time accessibility and interactivity embedded within these platforms have challenged and reshaped traditional journalistic gatekeeping.

To illustrate, in the pre-internet era, journalists and editors of established newspapers and television stations determined what constituted 'news'. They held the power to frame narratives based

Schritt 6: “Revise the manuscript”

The screenshot displays the PBD_Revise_o software interface. The top menu bar includes File, Edit, View, Insert, Format, Tools, Extensions, Help, and a highlighted 'Revise' menu. The 'Revise' dropdown menu is open, showing options: Source, Check reference, Expand (with a mouse cursor over it), Didactic element, Set table, and Create figure. The main text area contains the following content:

adapt to the digital age.
****CREATE FIGURE****

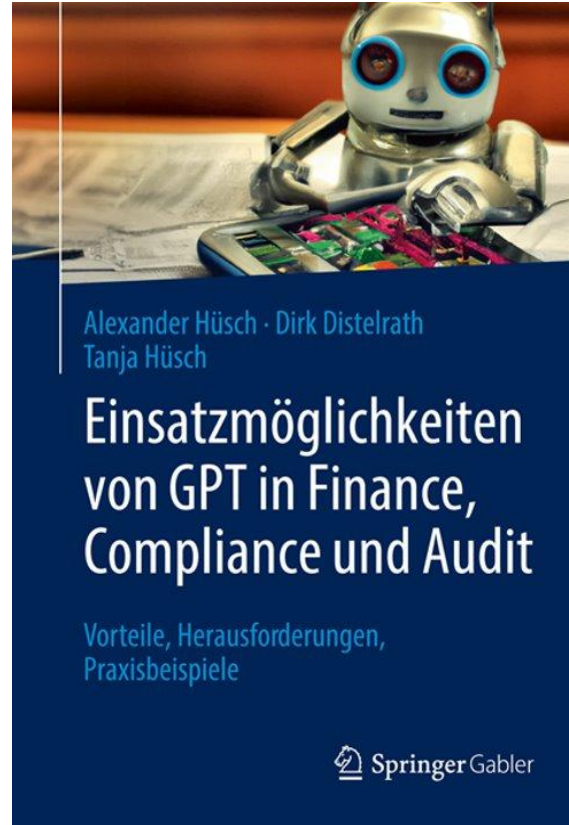
Another example is the "Book Innovation" network, created by Springer Nature. The network is a platform where researchers regularly to brainstorm, share best practices, and collaborate on research processes. This initiative has resulted in the development of new research methods and the creation of new research projects.

Looking at the publishing industry globally, the impact of societal challenges, climate change, megatrends and VUCA characteristics, coupled with new requirements for learning and working conditions, is pushing publishers to innovate continuously. The market demands are changing rapidly, and the traditional publishing model has been challenged. Cope and Kalantzis (2015) in their work "The Role of the Publishing Industry in an Era of Digital Access" have highlighted the same. They stated that decreasing sales figures, production, revenue, and employment are already being recorded in the industry. For traditional publishers to remain relevant and secure their position in this digital age, they need to develop a robust, agile, and innovative long-term strategy to adapt to these changing dynamics.

Innovation management thus plays a pivotal role in the publishing industry's success. Companies that have successfully fostered a culture of innovation and have implemented innovative practices and strategies have shown remarkable business success. This cultural shift

Das erste akademische Buch mit generativer KI

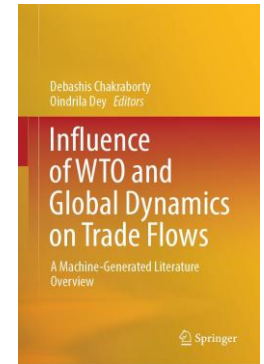
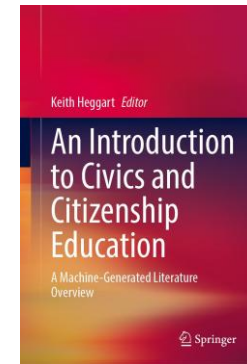
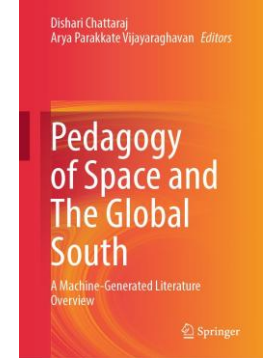
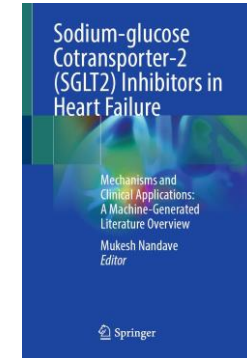
Schaut gerne rein!



Das Problem Information Overload!

Die SN Research Round-Ups

- Umfassende Auswahl relevanter Literatur inklusive abstraktiver Zusammenfassungen, erstellt in Mensch-Maschine-Kollaboration.
- Kostenloser Service für Autor:innen, um einen Überblick über Veröffentlichungen in ihrem Forschungsbereich zu erhalten.
- Eine Auswahl der Research Round-Ups erscheint zudem als Buch.
- Wir kennzeichnen, welche Teile von Menschen und welche von Maschinen erstellt wurden.



Das Problem Information Overload

Die SN Research Round-Ups

Introduction into Python

A SN Research Round-Up

Specially curated for
MVFP Future Media Now 2025

SPRINGER NATURE

Introduction to Python

Table of contents

1. Learn basic programming skills through gamified platforms

Publications:

1. A Proposal for an Educational Game Platform for Teaching Programming to Primary School Students [79] | [doi.org](#)
2. Development of a Puzzle Game to Learn Coding for Elementary Students [80] | [doi.org](#)
3. Exploring the User Experience and Effectiveness of Mobile Game-Based Learning in Higher Education [81] | [doi.org](#)
4. Exploring the efficacy of computer games as a pedagogical tool for teaching and learning programming: A systematic review [82] | [doi.org](#)
5. Pythra'a: A 2D Game for Supporting Pre-college Students Learning Python Programming Language [83] | [doi.org](#)
6. A Serious Game for Teaching Python Programming Language [84] | [doi.org](#)
7. A Review of Serious Games for Programming [85] | [doi.org](#)
8. Recognizing students emotions in game-based learning environment [86] | [doi.org](#)
9. Studying the effects of teaching programming to lower secondary school students with a serious game: a case study with Python and CodeCombat [87] | [doi.org](#)
10. Learning game development: Java shooter [88] | [doi.org](#)

2. Python language and Python programming

Publications:

1. The Python Programming Language [61] | [doi.org](#)
2. Essential Python Commands and Functions [62] | [doi.org](#)
3. Cognitive engagement as a predictor of learning gain in Python programming [63] | [doi.org](#)
4. Improving Engagement in Program Construction Examples for Learning Python Programming [64] | [doi.org](#)
5. Effects of teaching a computer programming language via hybrid interface on anxiety, cognitive load level and achievement of high school students [65] | [doi.org](#)
6. Teaching computational thinking using scenario-based learning tools [66] | [doi.org](#)
7. Coding in K-8: International Trends in Teaching Elementary/Primary Computing [67] | [doi.org](#)
8. Misconceptions about variables at the K-12 level [68] | [doi.org](#)

ATURE GROUP

Das Problem Information Overload

Introduction to Python

Development of a Puzzle Game to Learn Coding for Elementary Students [80]

This is a machine-generated summary of:

Baek, Jaisoon; Oh, Gyuhan Development of a Puzzle Game to Learn Coding for Elementary Students [80]

Published in: Lecture Notes in Computer Science (2019)

Link to original: https://doi.org/10.1007/978-3-030-30033-3_21

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If you want to cite the papers, please refer to the original.

For technical reasons we could not place the page where the original quote is coming from.

Research Highlights

As the importance of computational thinking has grown, various teaching methods have been developed to enhance students' thinking skills, particularly through coding experiences. Coding education is being introduced at a very young age, often through games designed to make coding concepts more accessible and engaging for elementary students. However, many existing coding games rely on icons and do not transition students to actual textual coding, making it difficult for teachers to track student progress. Now, a new study by Jaisoon Baek and colleagues introduces CodePlanet, a puzzle game that bridges this gap by providing a coding environment similar to textual language coding and offering real-time feedback on student progress.

The study developed CodePlanet to address the limitations of existing educational games by incorporating programming concepts into gameplay and designing the user interface to resemble an actual coding environment. The game uses icons that can be converted into text language, helping students transition from block-based visual languages to text-based languages used in real programming. CodePlanet also includes a web-based management system that allows teachers to monitor student progress in real-time and provide individualized feedback. The game was tested in regular software classes for sixth-grade students over two years, with assessments showing increased interest and comprehension among students compared to traditional lessons.

The main advances of this study include the integration of real programming concepts into a game format and the development of a management system that enhances teacher-student interaction. Future study could focus on analyzing gameplay data collected through the web-based monitoring system to evaluate the effectiveness of the coding learning game further. This approach could lead to improvements in software education quality by providing insights into student learning patterns and curriculum effectiveness. As software education becomes mandatory in South Korea, these findings highlight key elements that can enhance academic achievement in coding education.

Introduction to Python

Exploring the User Experience and Effectiveness of Mobile Game-Based Learning in Higher Education [81]

This is a machine-generated summary of:

Kasenides, Nicos; Piki, Andriani; Paspallis, Nearchos Exploring the User Experience and Effectiveness of Mobile Game-Based Learning in Higher Education [81]

Published in: Lecture Notes in Computer Science (2023)

Link to original: https://doi.org/10.1007/978-3-031-35927-9_6

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Research Highlights

The rapid advancement of mobile digital technology and the increased availability of mobile devices have significantly expanded the use of mobile learning across educational levels. This trend was further accelerated during the COVID-19 pandemic, highlighting the potential of mobile devices as effective learning tools. Game-Based Learning (GBL) and Mobile Game-Based Learning (MGBL) approaches have shown promise in enhancing learner autonomy and engagement, particularly in STEAM subjects. However, there is a notable gap in research regarding the use of mobile educational games for teaching programming and algorithmic thinking in higher education. Now, a new study by Nicos Kasenides and colleagues explores this gap by evaluating aMazeChallenge, an interactive multiplayer mobile game designed to teach programming fundamentals.

The study employed a mixed-methods approach to assess the effectiveness and user experience of aMazeChallenge among first-year undergraduate students. Participants were introduced to the game through tutorials and live demonstrations, followed by participation in online challenges using their personal mobile devices. Data were collected through observations, questionnaires, and field notes to capture students' experiences and perceptions. The game features a block-based coding environment using Google's Blockly, allowing students to program avatars to navigate mazes. Key learning objectives included reading existing code, fixing errors, writing new code, and optimizing code efficiency. The study aimed to understand how these features influenced student engagement and learning outcomes.

The findings suggest that while students reported increased confidence in their programming skills after using aMazeChallenge, many did not perceive significant improvements in their abilities. The study highlights several factors affecting engagement, including user interface design, personalization options, and competitive gameplay elements. Students appreciated the multiplayer mode but expressed frustration with technical issues such as app crashes. Future study could focus on enhancing cross-platform compatibility and addressing usability challenges to improve user experience. The research underscores the importance of integrating pedagogical design with technological features to foster effective learning environments in mobile educational games.

Das Problem Information Overload

Die SN Research Round-Ups

Chapter 2 Posterior Cruciate Ligament and Related Ligaments



Alfred J. Tria Jr. and Giles R. Scuderi

Introduction by the Editor

The posterior cruciate ligament (PCL) is a central stabilizer of the knee that prevents posterior motion in both full extension and 90 degrees of flexion. It is embryologically present by 6 weeks of gestation [5]. The ligament is composed of 2 bundles (with one article suggesting that there are 3). Its blood supply is from the middle geniculate. Scapinelli confirmed this with his autopsy dissections and contrast injections. There is minimal supply from the bone origin or insertion [55]. Schutte et al. identified mechanoreceptors and free nerve endings that account for motion, speed, acceleration, and pain reception. The innervations account for proprioception [56]. The double bundle structure enables the ligament to stabilize the knee throughout the range of motion [41].

Machine Generated Summaries

Disclaimer: The summaries in this chapter were generated from Springer Nature publications using abstractive AI auto-summarization: An abstraction-based summarizer creates new text based on deep learning. New phrases are created to summarize the content. As the constituted sentences are machine selected, they may not fully reflect the body of the work, so we strongly advise that the original content is

A. J. Tria Jr. (✉)
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New Brunswick, NJ, USA

G. R. Scuderi
Northwell Health Orthopaedic Institute, New York, NY, USA

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A. J. Tria Jr., G. R. Scuderi (eds.), *Ligaments of the Knee*,
https://doi.org/10.1007/978-3-031-66615-5_2

17

18

A. J. Tria Jr. and G. R. Scuderi

read and cited. The auto-generated summaries were curated by the editor to meet Springer Nature publication standards.

Machine generated keywords: reconstruction, mfls, pcl reconstruction, preserve, mfl, technique, footprint, pcl, tibial, patient, remnant, remnant preserve, dimple, posterior dimple, variant.

Posterior Cruciate Ligament: Anatomy and Biomechanics [49]

This is a machine-generated summary of:

Logterman, Stephanie L.; Wydra, Frank B.; Frank, Rachel M.: Posterior Cruciate Ligament: Anatomy and Biomechanics [49]

Published in: Current Reviews in Musculoskeletal Medicine (2018)

Link to original: <https://doi.org/10.1007/s12178-018-9492-1>

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If you want to cite the papers, please refer to the original.

For technical reasons we could not place the page where the original quote is coming from.

Research Highlights

The posterior cruciate ligament (PCL) is a key stabilizer in the knee, essential for maintaining proper kinematics and load distribution during movement. Despite its importance, PCL injuries are less common than those to the anterior cruciate ligament (ACL), leading to a relative paucity of research on its complex anatomy and biomechanics. A study by Logterman et al. provides a review of the most recent literature on PCL anatomy and biomechanics, offering valuable insights for physicians in the evaluation, diagnosis, and treatment of PCL injuries.

Logterman compiled data from various cadaveric, imaging, and arthroscopic studies to map out the details of the PCL's structure. The research delves into the characteristics of the PCL's two functional bundles—the anterolateral bundle (ALB) and posteromedial bundle (PMB)—and their respective attachment sites on the femur and tibia. The study also examines surrounding structures within the knee, such as the popliteal artery and vein, which are critical considerations during surgical procedures. By integrating findings from multiple studies, including those that measure distances between key anatomical landmarks and explore the impact of knee flexion angles on ligament tensioning, Logterman et al. have synthesized a comprehensive guide to PCL anatomy that is poised to enhance surgical precision.

The main advance presented by Logterman is a detailed understanding of how the PCL's two bundles contribute to knee stability through their distinct tensioning patterns across different ranges of motion. This knowledge is crucial for reconstructing the ligament anatomically and with appropriate tension to restore native knee function. As Logterman suggests, while current knowledge about the PCL is

7 KEY TAKEAWAYS

- Der Mensch ist der Astronaut, die KI der Treibstoff ("Human in the Loop")
- Transparenz schafft Vertrauen
- Mehr Mut zu Fehlerkultur
- Offener Austausch fördert Innovation
- Klare Ziele zeigen den Weg („Purpose“)
- Kernbotschaften setzen den Rahmen
- Es macht Spaß, neue Wege zu beschreiten



DANKE

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Senior Manager
Books Publishing Solutions
janina.krieger@springer.com

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