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| <b>Order Date</b>       | 29-Feb-2024 | <b>Type of Use</b> | Republish in a thesis/ dissertation      |
| <b>Order License ID</b> | 1456122-1   | <b>Publisher</b>   | AMERICAN SOCIETY OF MECHANICAL ENGINEERS |
| <b>ISSN</b>             | 1555-1423   | <b>Portion</b>     | Excerpt (up to 400 words)                |

## LICENSED CONTENT

|                          |  |                         |   |
|--------------------------|--|-------------------------|---|
| <b>Publication Title</b> | Journal of computational and nonlinear dynamics                                      | <b>Rightsholder</b>     | American Society of Mechanical Engineers ASME   |
| <b>Article Title</b>     | Computation of Direct Sensitivities of Spatial Multibody Systems with Joint Friction | <b>Publication Type</b> | e-Journal   |
| <b>Author/Editor</b>     | American Society of Mechanical Engineers.  | <b>Issue</b>            | 7   |
| <b>Date</b>              | 01/01/2006   | <b>Volume</b>           | 17  |
| <b>Language</b>          | English  | <b>URL</b>              | <a href="http://scitation.aip.org/ASMEJournals/CND">http://scitation.aip.org/ASMEJournals/CND</a> |
| <b>Country</b>           | United States of America   |                         |   |

## REQUEST DETAILS

|  |                           |                                    |                                  |
|--|---------------------------|------------------------------------|----------------------------------|
| <b>Portion Type</b>                    | Excerpt (up to 400 words) | <b>Distribution</b>                | Worldwide                        |
| <b>Number of Excerpts</b>              | 2                         | <b>Translation</b>                 | Original language of publication |
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| <b>Rights Requested</b>                | Main product              |                                    |                                  |

## NEW WORK DETAILS

|                        |   |                                   |               |
|------------------------|---|-----------------------------------|---------------|
| <b>Title</b>           | Optimal Design and Control of Multibody Systems with Friction | <b>Institution Name</b>           | Virginia Tech |
| <b>Instructor Name</b> | Corina Sandu  | <b>Expected Presentation Date</b> | 2025-02-28    |

## ADDITIONAL DETAILS

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| Order Reference Number | N/A | The Requesting Person / Organization to Appear on the License | Adwait Verulkar |
|------------------------|-----|---|-----------------|

## REQUESTED CONTENT DETAILS

|   |  |  |  |
|---|--|--|--|
| Title, Description or Numeric Reference of the Portion(s) | Figs. 1, 2 and content of the paper from Section 6: Validation of Sensitivities and onwards. | Title of the Article / Chapter the Portion Is From | Computation of Direct Sensitivities of Spatial Multibody Systems with Joint Friction |
| Editor of Portion(s)                                      | Verulkar, Adwait; Sandu, Corina; Dopico, Daniel; Sandu, Adrian                               | Author of Portion(s)                               | Verulkar, Adwait; Sandu, Corina; Dopico, Daniel; Sandu, Adrian                       |
| Volume / Edition  | 17   | Issue, if Republishing an Article From a Serial    | 7  |
| Page or Page Range of Portion                             | 3, 4, 7-11   | Publication Date of Portion                        | 2022-07-01   |

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*Last updated October 2022*



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| <b>Order License ID</b> | 1459374-1   | <b>Publisher</b>   | AMERICAN SOCIETY OF<br>MECHANICAL ENGINEERS |
| <b>ISSN</b>             | 1555-1423   | <b>Portion</b>     | Chart/graph/table/figure                    |

## LICENSED CONTENT

|                          |   |                         |  |
|--------------------------|---|-------------------------|--|
| <b>Publication Title</b> | Journal of computational<br>and nonlinear dynamics  | <b>Rightsholder</b>     | American Society of<br>Mechanical Engineers<br>ASME  |
| <b>Article Title</b>     | Computation of Direct<br>Sensitivities of Spatial<br>Multibody Systems with<br>Joint Friction | <b>Publication Type</b> | e-Journal  |
| <b>Author/Editor</b>     | American Society of<br>Mechanical Engineers.  | <b>Issue</b>            | 7  |
| <b>Date</b>              | 01/01/2006  | <b>Volume</b>           | 17   |
| <b>Language</b>          | English   | <b>URL</b>              | <a href="http://scitation.aip.org/ASMEJournals/CND">http://scitation.aip.org/<br/>ASMEJournals/CND</a> |
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## NEW WORK DETAILS

|                        |   |                                       |               |
|------------------------|---|---------------------------------------|---------------|
| <b>Title</b>           | Optimal Design and<br>Control of Multibody<br>Systems with Friction | <b>Institution Name</b>               | Virginia Tech |
| <b>Instructor Name</b> | Corina Sandu  | <b>Expected Presentation<br/>Date</b> | 2025-02-28    |

## ADDITIONAL DETAILS

|                        |     |   |                 |
|------------------------|-----|---|-----------------|
| Order Reference Number | N/A | The Requesting Person / Organization to Appear on the License | Adwait Verulkar |
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## REQUESTED CONTENT DETAILS

|   |  |  |  |
|---|--|--|--|
| Title, Description or Numeric Reference of the Portion(s) | All equations, figures and tables from Section 6 onwards       | Title of the Article / Chapter the Portion Is From | Computation of Direct Sensitivities of Spatial Multibody Systems with Joint Friction |
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“Rightsholder(s)” are the holders of copyright rights in the Works for which a User obtains licenses via the Marketplace platform, which are displayed on specific Order Confirmations.

“Terms” means the terms and conditions set forth in these General Terms and any additional Order Confirmation Terms collectively.

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4) **Representations; Acceptance.** By using the Service, User represents and warrants that User has been duly authorized by the User to accept, and hereby does accept, all Terms.

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i) The copies and anthologies created under this License may be made and assembled by faculty members individually or at their request by on-campus bookstores or copy centers, or by off-campus copy shops and other similar entities.

ii) No License granted shall in any way: (i) include any right by User to create a substantively non-identical copy of the Work or to edit or in any other way modify the Work (except by means of deleting material immediately preceding or following the entire portion of the Work copied) (ii) permit "publishing ventures" where any particular anthology would be systematically marketed at multiple institutions.

iii) Subject to any Publisher Terms (and notwithstanding any apparent contradiction in the Order Confirmation arising from data provided by User), any use authorized under the academic pay-per-use service is limited as follows:

A) any License granted shall apply to only one class (bearing a unique identifier as assigned by the institution, and thereby including all sections or other subparts of the class) at one institution;

B) use is limited to not more than 25% of the text of a book or of the items in a published collection of essays, poems or articles;

C) use is limited to no more than the greater of (a) 25% of the text of an issue of a journal or other periodical or (b) two articles from such an issue;

D) no User may sell or distribute any particular anthology, whether photocopied or electronic, at more than one institution of learning;

E) in the case of a photocopy permission, no materials may be entered into electronic memory by User except in order to produce an identical copy of a Work before or during the academic term (or analogous period) as to which any particular permission is granted. In the event that User shall choose to retain materials that are the subject of a photocopy permission in electronic memory for purposes of producing identical copies more than one day after such retention (but still within the scope of any permission granted), User must notify CCC of such fact in the applicable permission request and such retention shall constitute one copy actually sold for purposes of calculating permission fees due; and

F) any permission granted shall expire at the end of the class. No permission granted shall in any way include any right by User to create a substantively non-identical copy of the Work or to edit or in any other way modify the Work (except by means of deleting material immediately preceding or following the entire portion of the Work copied).

iv) Books and Records; Right to Audit. As to each permission granted under the academic pay-per-use Service, User shall maintain for at least four full calendar years books and records sufficient for CCC to determine the numbers of copies made by User under such permission. CCC and any representatives it may designate shall have the right to audit such books and records at any time during User's ordinary business hours, upon two days' prior notice. If any such audit shall determine that User shall have underpaid for, or underreported, any photocopies sold or by three percent (3%) or more, then User shall bear all the costs of any such audit; otherwise, CCC shall bear the costs of any such audit. Any amount determined by such audit to have been underpaid by User shall immediately be paid to CCC by User, together with interest thereon at the rate of 10% per annum from the date such amount was originally due. The provisions of this paragraph shall survive the termination of this License for any reason.

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A) **Posting e-reserves, course management systems, e-coursepacks for text-based content**, which grants authorizations to import requested material in electronic format, and allows electronic access to this material to members of a designated college or university class, under the direction of an instructor designated by the college or university, accessible only under appropriate electronic controls (e.g., password);

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C) **Posting e-reserves, course management systems, e-coursepacks or other academic distribution for audiovisual content**, which grants not only the authorizations described in Section 14(b)(i)(A) above, but also the following authorizations: (i) to include the requested material in course materials for use consistent with Section 14(b)(i)(A) above; (ii) to display and perform the requested material to such members of such class in the physical classroom or remotely by means of streaming media or other video formats; and (iii) to "clip" or reformat the requested material for purposes of time or content management or ease of delivery, provided that such "clipping" or reformatting does not alter the underlying editorial content or meaning of the requested material and that the resulting material is used solely within the scope of, and in a manner consistent with, the particular authorization described in the Order Confirmation and the Terms. Unless expressly set forth in the relevant Order Confirmation, the License does not authorize any other form of manipulation, alteration or editing of the requested material.

ii) Unless expressly set forth in the relevant Order Confirmation, no License granted shall in any way: (i) include any right by User to create a substantively non-identical copy of the Work or to edit or in any other way modify the Work (except by means of deleting material immediately preceding or following the entire portion of the Work copied or, in the case of Works subject to Sections 14(b)(1)(B) or (C) above, as described in such Sections) (ii) permit "publishing ventures" where any particular course materials would be systematically marketed at multiple institutions.

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A) any License granted shall apply to only one class (bearing a unique identifier as assigned by the institution, and thereby including all sections or other subparts of the class) at one institution;

B) use is limited to not more than 25% of the text of a book or of the items in a published collection of essays, poems or articles;

C) use is limited to not more than the greater of (a) 25% of the text of an issue of a journal or other periodical or (b) two articles from such an issue;

D) no User may sell or distribute any particular materials, whether photocopied or electronic, at more than one institution of learning;

E) electronic access to material which is the subject of an electronic-use permission must be limited by means of electronic password, student identification or other control permitting access solely to students and instructors in the class;

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v) Books and Records; Right to Audit. As to each permission granted under the electronic course content Service, User shall maintain for at least four full calendar years books and records sufficient for CCC to determine the numbers of copies made by User under such permission. CCC and any representatives it may designate shall have the right to audit such books and records at any time during User's ordinary business hours, upon two days' prior notice. If any such audit shall determine that User shall have underpaid for, or underreported, any electronic copies used by three percent (3%) or more, then User shall bear all the costs of any such audit; otherwise, CCC shall bear the costs of any such audit. Any amount determined by such audit to have been underpaid by User shall immediately be paid to CCC by User, together with interest thereon at the rate of 10% per annum from the date such amount was originally due. The provisions of this paragraph shall survive the termination of this license for any reason.

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#### 15) Miscellaneous.

a) User acknowledges that CCC may, from time to time, make changes or additions to the Service or to the Terms, and that Rightsholder may make changes or additions to the Rightsholder Terms. Such updated Terms will replace the prior terms and conditions in the order workflow and shall be effective as to any subsequent Licenses but shall not apply to Licenses already granted and paid for under a prior set of terms.

b) Use of User-related information collected through the Service is governed by CCC’s privacy policy, available online at [www.copyright.com/about/privacy-policy/](http://www.copyright.com/about/privacy-policy/).

c) The License is personal to User. Therefore, User may not assign or transfer to any other person (whether a natural person or an organization of any kind) the License or any rights granted thereunder; provided, however, that, where applicable, User may assign such License in its entirety on written notice to CCC in the event of a transfer of all or substantially all of User’s rights in any new material which includes the Work(s) licensed under this Service.

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e) The License described in the Order Confirmation shall be governed by and construed under the law of the State of New York, USA, without regard to the principles thereof of conflicts of law. Any case, controversy, suit, action, or proceeding arising out of, in connection with, or related to such License shall be brought, at CCC’s sole discretion, in any federal or state court located in the County of New York, State of New York, USA, or in any federal or state court whose geographical jurisdiction covers the location of the Rightsholder set forth in the Order Confirmation. The parties expressly submit to the personal jurisdiction and venue of each such federal or state court.

*Last updated October 2022*