

Concept: A Shared-Sensing Satellite Network

Daniel Topa

Huntington Ingalls Industries Mission Technologies
Albuquerque, USA

)

Air Force Research Laboratory
Albuquerque, USA

Abstract

This paper proposes a novel framework for shared-sensing satellite networks, leveraging parallel discrete event simulation principles for autonomous collaboration in space missions.

CCS Concepts

• **Satellite systems** → **Autonomous sensing**.

Keywords

Satellite networks, orbital debris, PDES, collision avoidance

ACM Reference Format:

Daniel Topa and). 2025. Concept: A Shared-Sensing Satellite Network. In . ACM, New York, NY, USA, 1 page. <https://doi.org/10.1145/nnnnnnn.nnnnnnn>

1 Introduction

The introduction of autonomous collaboration between satellites...

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than the author(s) must be honored. Abstracting with credit is permitted. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permissions from permissions@acm.org.

Conference'17, Washington, DC, USA

© 2025 Copyright held by the owner/author(s). Publication rights licensed to ACM.
ACM ISBN 978-x-xxxx-xxxx-x/YYYY/MM
<https://doi.org/10.1145/nnnnnnn.nnnnnnn>