Jared Coleman jaredraycoleman@gmail.com
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Summary & Skills

I have a broad interest in computer science. My research interests include distributed computing, the internet of things (IoT), blockchain, mobile robotics, discrete mathematics, computational geometry, and game theory.

Languages: Python, C/C++, Java, JavaScript

Technologies/Frameworks: Docker, Tendermint, Git, React, Gitpod

Graduate Courses: Advanced Algorithm Design, Distributed Systems, Formal Verification, Randomized Algorithms, Theory of Computation, High-Performance Computing, Programming Languages, Operating Systems

Education

University of Southern California Los Angeles, CA
Ph.D. in Computer Science; GPA: 4.0 *Aug 2020 – Present*

California State University, Long Beach Long Beach, CA
Master of Science in Computer Science; GPA: 4.0 *Aug 2018 – May 2020*
Bachelor of Science in Computer Science; GPA: 3.6 *Aug 2013 – May 2018*

Experience

The Aerospace Corporation El Segundo, CA
Casual Member of the Technical Staff *Aug 2020 – Present*
Member of the Technical Staff *Mar 2020 – Aug 2020*
Associate Member of the Technical Staff *Sep 2018 – Mar 2020*
Intern *Jan 2018 – Aug 2018*

- Design software that helps Aerospace rapidly develop scalable, modular, and efficient analyses for launch vehicle verification in simulation, day-of-launch, and post-flight environments.

CSULB Research Foundation Long Beach, CA
Student Research Assistant *Mar 2017 – May 2018*

- Developed software and simulations for systems of cooperative robots.

Publications

Graph Convolutional Network-based Scheduler for Distributing Computation in the IoRT
Jared Coleman, Mehrdad Kiamari, Lillian Clark, Daniel D'Souza, Bhaskar Krishnamachari
MILCOM 2023 WS-7 - Workshop On The Internet Of Things For Adversarial Environments

Delivery to Safety with Two Cooperating Robots
Jared Coleman, Evangelos Kranakis, Danny Krizanc, Oscar Morales-Ponce
SOFSEM 2023 - International Conference on Current Trends in Theory and Practice of Computer Science

The Snow Plow Problem: Perpetual Maintenance by Mobile Agents on the Line
Jared Coleman, Oscar Morales-Ponce
ICDCN 2023 - International Conference on Distributed Computing and Networking

Line Search for an Oblivious Moving Target
Jared Coleman, Evangelos Kranakis, Danny Krizanc, Oscar Morales-Ponce
OPODIS 2022 - International Conference on Principles of Distributed Systems

Multi-Objective Network Synthesis for Dispersed Computing in Tactical Environments
Jared Coleman, Eugenio Grippo, Bhaskar Krishnamachari, Gunjan Verma
SPIE Defense + Commercial Sensing 2022

Network Synthesis for Tactical Environments: Scenario, Challenges, and Opportunities
Tzanis Anevlavis, Jonathan Bunton, Jared Coleman, Mine Dogan, Eugenio Grippo, Abel Souza, Christina Fragouli Bhaskar Krishnamachari, Matthew Maness, Karl Olson, Prashant Shenoy, Paulo Tabuada, Gunjan Verma
efense + Commercial Sensing 2022

Robotic Sorting on the Grid
Jared Coleman, Oscar Morales-Ponce
ICDCN 2022 - 23rd International Conference on Distributed Computing and Networking

Message Delivery in the Plane by Robots with Different Speeds
Jared Coleman, Evangelos Kranakis, Oscar Morales-Ponce, Danny Krizanc
SSS 2021 - 23rd International Symposium on Stabilization, Safety, and Security of Distributed Systems

The Pony Express Communication Problem
Jared Coleman, Evangelos Kranakis, Oscar Morales-Ponce, Danny Krizanc
In Proceedings IWOCA 2021 - 32nd International Workshop on Combinatorial Algorithms

Minimizing The Maximum Distance Traveled To Form Patterns With Systems of Mobile Robots
Jared Coleman, Evangelos Kranakis, Oscar Morales-Ponce, Jorge Urrutia, Birgit Vogtenhuber
In proceedings CCCG 2020, 32nd Canadian Conference on Computational Geometry, August 5-7, 2020

Projects

GCN-Turtlebot (github.com/ANRGUSC/gcnschedule-turtlenet)
GCN-based Scheduler for Distributing Computation in the Internet of Robotic Things
First-place winner: 2nd Student Designgit ad Competition on Networked Computing on the Edge at CPS IoT Week 2022

Secure IIoT Autonomous Networks Research Group & Chevron
Using blockchain technology to secure industrial IoT systems

Kubishi (kubishi.com)
An online dictionary and encyclopedia for Owens Valley Paiute language and culture *2020*

Aerocube @ The Beach CSULB & The Aerospace Corporation
Distrubuted robotics systems for space - a proof of concept *2017*