



Sistema Integral de Información Académica
Coordinación de Planeación, Evaluación y
Simplificación de la Gestión Institucional
Reporte individual



JORGE ANGEL DAVILA MONTOYA

Datos Generales

Nombre: JORGE ANGEL DAVILA MONTOYA

Máximo nivel de estudios: DOCTORADO

Antigüedad académica en la UNAM: 10 años

Nombramientos

Último: PROFESOR ASIGNATURA A TP No Definitivo
Facultad de Ingeniería
Desde 01-11-2008 hasta 30-10-2010

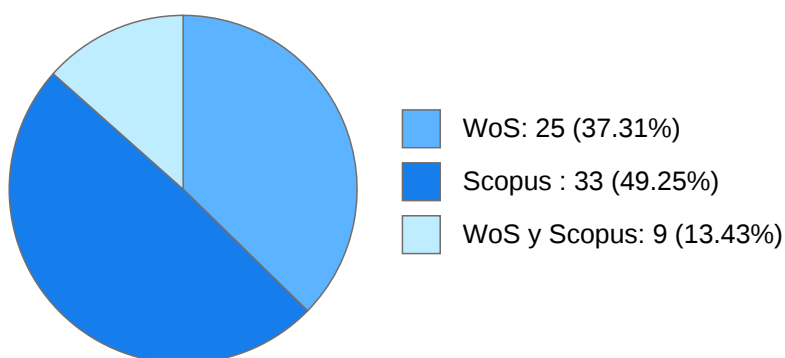
Estímulos, programas, premios y reconocimientos

SNI II 2017 - 2023
SNI I 2010 - 2016
PRIDE B - 2010
PRIDE A 2008
PASPA Estudios de Postgrado 2005 - 2008

JORGE ANGEL DAVILA MONTOYA

DOCUMENTOS EN REVISTAS

Histórico de Documentos



#	Título	Autores	Revista	Año
1	Finite-Time State Observer for a Class of Linear Time-Varying Systems With Unknown Inputs	JORGE ANGEL DAVILA MONTOYA LEONID FRIDMAN Markus Tranninger	IEEE TRANSACTIONS ON AUTOMATIC CONTROL	2022
2	Increasing Power Generation Efficiency in Horizontal Wind Turbines by Rejecting Electromechanical Uncertainties Due to the Wind	JORGE ANGEL DAVILA MONTOYA Merida J. Aguilar L.T.	Ieee Control Systems Letters	2022
3	Robust Trajectory Tracking for an Uncertain UAV Based on Active Disturbance Rejection	JORGE ANGEL DAVILA MONTOYA Blas L.A. Salazar S. et al.	Ieee Control Systems Letters	2022
4	A Collaborative Observer for Switched Linear Systems with Unknown Inputs	JORGE ANGEL DAVILA MONTOYA Raissi T. Ping X.	Proceedings of the American Control Conference	2021
5	A 6-DOF sliding mode fault tolerant control solution for in-orbit autonomous rendezvous	DOLORES ALEJANDRA FERREIRA DE LOZA JORGE ANGEL DAVILA MONTOYA Henry D. et al.	AEROSP SCI TECHNOL	2021
6	Linear Hybrid Systems with Periodic Jumps: A Notion of Strong Observability and Strong Detectability	JORGE ANGEL DAVILA MONTOYA Rios H. Teel A.R.	IEEE TRANSACTIONS ON AUTOMATIC CONTROL	2020

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7	Robust stabilisation of linear time-invariant time-delay systems via first order and super-twisting sliding mode controllers	JORGE ANGEL DAVILA MONTOYA Ramírez Jerónimo L.F. Torres J.Z. et al.	IET CONTROL THEORY AND APPLICATIONS	2020
8	A super-twisting sliding mode control in a backstepping setup for rendezvous with a passive target	JORGE ANGEL DAVILA MONTOYA Torres J.Z. Cieslak J. et al.	IFAC PAPERSONLINE	2019
9	Sliding Motions on $SO(3)$, Sliding Subgroups	FERNANDO FRANCISCO CASTAÑOS ZUNO JORGE ANGEL DAVILA MONTOYA Gomez Cortes G.C.	IEEE Conference on Decision and Control Automatica	2019
10	On the strong observability in linear time-varying singular systems	FRANCISCO JAVIER BEJARANO RODRIGUEZ JORGE ANGEL DAVILA MONTOYA LEONID FRIDMAN et al.	2019	
11	A Two-Step Approach for an Enhanced Quadrotor Attitude Estimation via IMU Data	JORGE ANGEL DAVILA MONTOYA Chang J. Cieslak J. et al.	IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY	2018
12	A Decoupling Approach to Design Observers for Polytopic Takagi-Sugeno Models Subject to Unknown Inputs	JORGE ANGEL DAVILA MONTOYA FRANCISCO JAVIER BEJARANO RODRIGUEZ Rebai S.B. et al.	Proceedings of the American Control Conference	2018
13	Robust control of an uncertain UAV via high-order sliding mode compensation	JORGE ANGEL DAVILA MONTOYA Salazar S.	IFAC PAPERSONLINE	2017
14	A robust controller for trajectory tracking of a DC motor pendulum system	JORGE ANGEL DAVILA MONTOYA Aguilar-Ibañez C. Mendoza-Mendoza J. et al.	INTERNATIONAL JOURNAL OF CONTROL AUTOMATION AND SYSTEMS	2017
15	Analysis and design of second-order sliding-mode algorithms for quadrotor roll and pitch estimation	JORGE ANGEL DAVILA MONTOYA Chang J. Cieslak J. et al.	ISA TRANSACTIONS	2017
16	Quadrotor attitude estimation with gyroscope bias reconstruction capabilities	JORGE ANGEL DAVILA MONTOYA Chang J. Cieslak J. et al.	IFAC PAPERSONLINE	2016
17	High-order sliding modes based linearization: An application to roll autopilot	JORGE ANGEL DAVILA MONTOYA Monsivais A. Mosqueda A.	Mechanisms And Machine Science	2015
18	Fault tolerant controller for a class of additive faults: A quasi-continuous high-order sliding mode approach	JORGE ANGEL DAVILA MONTOYA Cieslak J. Henry D. et al.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2015

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19	Fault detection and isolation for nonlinear systems via high-order-sliding-mode multiple-observer	H. Rios JORGE ANGEL DAVILA MONTOYA LEONID FRIDMAN et al.	INTERNATIONAL JOURNAL OF ROBUST AND NONLINEAR CONTROL	2015
20	Discrete state estimation for switched LPV systems using parameter identification	HECTOR RIOS BARAJAS JORGE ANGEL DAVILA MONTOYA Mincarelli D. et al.	Proceedings of the American Control Conference	2014
21	A nonlinear robust PI controller for an uncertain system	JORGE ANGEL DAVILA MONTOYA Aguilar-Ibañez C. Mendoza-Mendoza J.A. et al.	INTERNATIONAL JOURNAL OF CONTROL	2014
22	Distributed tracking of first order systems using second-order sliding modes	JORGE ANGEL DAVILA MONTOYA	IFAC Proceedings Volumes (IFAC-PapersOnline)	2014
23	Analysis and synthesis of sliding mode control for large scale variable speed wind turbine for power optimization	JORGE ANGEL DAVILA MONTOYA Mérida J. Aguilar L.T.	RENEWABLE ENERGY	2014
24	Distributed tracking for mechanical systems using second-order sliding-modes	JORGE ANGEL DAVILA MONTOYA	IEEE International Workshop on Variable Structure Systems	2014
25	Stabilization of the cart pole system: by sliding mode control	JORGE ANGEL DAVILA MONTOYA Aguilar-Ibañez C. Mendoza-Mendoza J.	NONLINEAR DYNAMICS	2014
26	Exact tracking using backstepping control design and high-order sliding modes	JORGE ANGEL DAVILA MONTOYA	IEEE TRANSACTIONS ON AUTOMATIC CONTROL	2013
27	Output feedback trajectory stabilization of the uncertainty DC servomechanism system	JORGE ANGEL DAVILA MONTOYA Aguilar-Ibañez C. Garrido-Moctezuma R.	ISA TRANSACTIONS	2012
28	Continuous and discrete state reconstruction for nonlinear switched systems via high-order sliding-mode observers	JORGE ANGEL DAVILA MONTOYA Pisano, Alessandro Usai, Elio	INTERNATIONAL JOURNAL OF SYSTEMS SCIENCE	2011

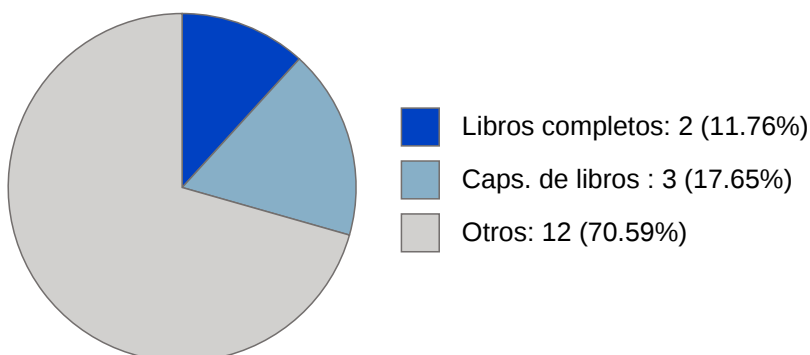
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29	Sliding mode parameter adjustment for perturbed linear systems with actuators via invariant ellipsoid method	JORGE ANGEL DAVILA MONTOYA Poznyak, A	INTERNATIONAL JOURNAL OF ROBUST AND NONLINEAR CONTROL	2011
30	Finite-time state observation for non-linear uncertain systems via higher-order sliding modes	JORGE ANGEL DAVILA MONTOYA LEONID FRIDMAN Pisano, Alessandro et al.	INTERNATIONAL JOURNAL OF CONTROL	2009
31	Second order sliding-mode observer for estimation of vehicle dynamic parameters	LEONID FRIDMAN JORGE ANGEL DAVILA MONTOYA M'Sirdi, N. K. et al.	INT J VEHICLE DES	2008
32	On the fixed-time consensus problem for nonlinear uncertain multiagent systems under switching topology	JORGE ANGEL DAVILA MONTOYA Pisano A.	INTERNATIONAL JOURNAL OF ROBUST AND NONLINEAR CONTROL	
33	State estimation for linear hybrid systems with periodic jumps and unknown inputs	HECTOR RIOS BARAJAS JORGE ANGEL DAVILA MONTOYA Teel A.R.	INTERNATIONAL JOURNAL OF ROBUST AND NONLINEAR CONTROL	

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LIBROS Y CAPITULOS CON ISBN

Obras con registro ISBN



#	Título	Autores	Alcance	Año	ISBN
1	Disturbance observer-based fault-tolerant control for a class of additive faults	JORGE ANGEL DAVILA MONTOYA Cieslak J. Henry D.	Capítulo de un Libro	2019	9780128170380
2	New trends in observer-based control: An introduction to design approaches and engineering applications	JORGE ANGEL DAVILA MONTOYA Boubaker O. Zhu Q.M. et al.	Libro Completo	2019	9780128170380
3	New Trends in Observer-based Control: A Practical Guide to Process and Engineering Applications	JORGE ANGEL DAVILA MONTOYA Boubaker O. Zhu Q. et al.	Libro Completo	2019	9780128170342
4	A Tracking Backstepping Sliding-Mode Control for Spacecraft Rendezvous with a Passive Target	JORGE ANGEL DAVILA MONTOYA Zenteno-Torres J. Cieslak J. et al.	Conferencia Paper	2018	9781538628645
5	Introduction to sliding mode control	JORGE ANGEL DAVILA MONTOYA LEONID FRIDMAN Ferrara A.	Capítulo de un Libro	2017	9781785612091
6	Robust exact observation and identification via high-order sliding modes	LEONID FRIDMAN JORGE ANGEL DAVILA MONTOYA Levant A.	Capítulo de un Libro	2016	9781439802885
7	Quad-rotor orientation control by predictor based sliding mode control	JORGE ANGEL DAVILA MONTOYA Ordaz J. Salazar S. et al.	Conferencia Paper	2016	9781509017843

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8	Design of sliding mode observers for quadrotor pitch/roll angle estimation via IMU measurements	JORGE ANGEL DAVILA MONTOYA Chang J. Cieslak J. et al.	Conference Paper	2016	9781509017843
9	Adaptive second-order sliding mode observer for quadrotor attitude estimation	JORGE ANGEL DAVILA MONTOYA Chang J. Cieslak J. et al.	Conference Paper	2016	9781467386821
10	Fixed-time consensus for a class of nonlinear uncertain multi-agent systems	JORGE ANGEL DAVILA MONTOYA Pisano A.	Conference Paper	2016	9781467386821
11	Attitude and altitude control on board of an ornithopter	JORGE ANGEL DAVILA MONTOYA Torres J.Z. Lozano R.	Conference Paper	2016	9781467393331
12	Attitude control of spacecraft using robust backstepping controller based on high order sliding modes	JORGE ANGEL DAVILA MONTOYA Gómez-Cortés G.-C.	Conference Paper	2013	9781624102240
13	Robust quasi-continuous sliding-mode control of a variable-speed wind turbine	JORGE ANGEL DAVILA MONTOYA Merida J.O. Aguilar L.T.	Conference Paper	2012	9781467321686
14	High-order sliding modes observation	LEONID FRIDMAN JORGE ANGEL DAVILA MONTOYA Arie Levant	Proceedings Paper	2008	9781424421992
15	High-order sliding observation and fault detection	JORGE ANGEL DAVILA MONTOYA LEONID FRIDMAN Levant A.	Conference Paper	2008	9781424425051
16	Observation and estimation of dynamics performance of heavy vehicle via second order sliding modes	JORGE ANGEL DAVILA MONTOYA LEONID FRIDMAN Bouteldja M. et al.	Conference Paper	2006	1424402085
17	Observation and identification of mechanical systems via second order sliding modes	JORGE ANGEL DAVILA MONTOYA LEONID FRIDMAN Poznyak A.	Conference Paper	2006	1424402085



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PARTICIPACIÓN EN PROYECTOS

No se encuentran registros en la base de datos de SISEPRO asociados a:

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PARTICIPACIÓN EN TESIS

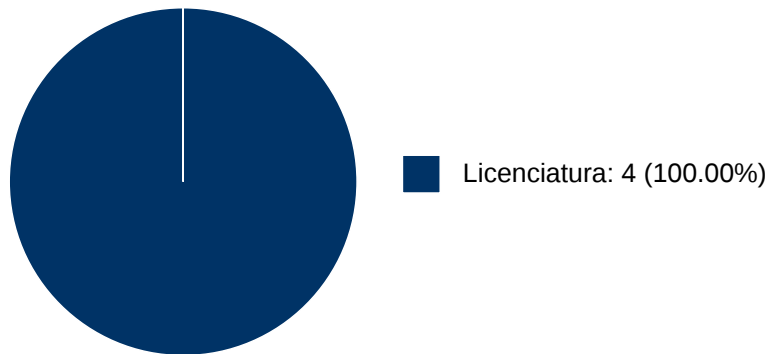
No se encuentran registros en la base de datos de TESIUNAM asociados a:

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DOCENCIA IMPARTIDA

Histórico de docencia



#	Nivel titulación	Asignatura	Entidad	Alumnos	Semestre
1	Licenciatura	CONTROL AUTOMATICO	Facultad de Ingeniería	24	2010-2
2	Licenciatura	CONTROL AUTOMATICO	Facultad de Ingeniería	32	2010-1
3	Licenciatura	CONTROL AUTOMATICO	Facultad de Ingeniería	32	2009-2
4	Licenciatura	CONTROL AUTOMATICO	Facultad de Ingeniería	18	2009-1



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PATENTES

No se encuentran registros en la base de datos de patentes asociados a:

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FUENTES DE INFORMACIÓN

Internos

#	Información	Fuente	Sistema	Periodo
1	Grupos ordinarios y resumen de historias académicas	DGAE	SIAE	2008-2025
2	Nombramientos, datos generales, estímulos, premios y reconocimientos	DGAPA	RUPA	2008-2025
3	Producción Académica	CH	Humanindex	2008-2021
4	Producción Académica	CIC	SCIC	2000-2017
5	Proyectos	DGPO	SISEPRO	2018-2022
6	Tesis	DGB	TESIUNAM	2008-2025
7	Tutorías en Posgrado	CGEP	SIIPosgrado	2008-2021

Externos

#	Información	Fuente	Sistema	Periodo
8	Documentos Indexados	Elsevier	Scopus	2008-2025
9	Documentos Indexados	Thomson Reuters	WoS	2008-2025
10	Obras con registro ISBN	INDAUTOR	Agencia ISBN	2008-2025
11	Patentes	IMPI	SIGA	2008-2024