Publications:

Overnight glucose control in people with type 1 diabetes
Publication: Research - peer-review › Journal article – Annual report year: 2018

Adaptive control in an artificial pancreas for people with type 1 diabetes
Publication: Research - peer-review › Journal article – Annual report year: 2016

An Adaptive Nonlinear Basal-Bolus Calculator for Patients With Type 1 Diabetes
Publication: Research - peer-review › Journal article – Annual report year: 2016

C code generation applied to nonlinear model predictive control for an artificial pancreas
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Model for Simulating Fasting Glucose in Type 2 Diabetes and the Effect of Adherence to Treatment.
Publication: Research - peer-review › Conference article – Annual report year: 2017

An Efficient UD-Based Algorithm for the Computation of Maximum Likelihood Sensitivity of Continuous-Discrete Systems
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

An Ensemble Nonlinear Model Predictive Control Algorithm in an Artificial Pancreas for People with Type 1 Diabetes
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Application of the Continuous-Discrete Extended Kalman Filter for Fault Detection in Continuous Glucose Monitors for Type 1 Diabetes
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Comparison of Three Nonlinear Filters for Fault Detection in Continuous Glucose Monitors
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Model Identification using Continuous Glucose Monitoring Data for Type 1 Diabetes
Publication: Research - peer-review › Conference article – Annual report year: 2016

On the significance of the noise model for the performance of a linear MPC in closed-loop operation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016
Strategies for glucose control in people with type 1 diabetes
Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

ARX MPC for people with type 1 diabetes
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Implications and Limitations of Ideal Insulin Administration for People with Type 1 Diabetes
Publication: Research - peer-review › Article in proceedings – Annual report year: 2010

Meal Estimation in Nonlinear Model Predictive Control for Type 1 Diabetes
Publication: Research - peer-review › Article in proceedings – Annual report year: 2010

Nonlinear Model Predictive Control for an Artificial Beta-Cell
Publication: Research - peer-review › Book chapter – Annual report year: 2010

Optimal Insulin Administration for People with Type 1 Diabetes
Publication: Research - peer-review › Article in proceedings – Annual report year: 2010

DiaCon: an interdisciplinary approach to diabetes control
Publication: Research - peer-review › Poster – Annual report year: 2009

Projects:

A bi-hormonal Artificial Pancreas based on an Ensemble Nonlinear Model Predictive Control Algorithm
Project: PhD

Model Predictive Control algorithms for pen and pump insulin administration
Project: PhD

Activities:

Mathematical modeling of neurons: Perspectives for the treatment of epilepsy
Activity: Talks and presentations › Guest lectures, external teaching and course activities at other universities

10th International Conference on Advanced Technologies and Treatments for Diabetes
Activity: Attending an event › Participating in or organising a conference

University of Virginia
Activity: Visiting an external institution › Visiting another research institution

19th Nordic Process Control Workshop
Activity: Talks and presentations › Conference presentations