

# Curriculum Vitae

Yazdan Batmani

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## Personal Information

**Date of Birth:** March 25, 1984  
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## Education

**2009- 2014:** Ph.D. in Control Engineering, ECE Faculty, Khaje Nasir Toosi University of Technology (KNTU), Tehran, Iran.  
PhD Thesis: Optimal Control for a Class of Nonlinear Time-delay Systems.  
**2007- 2009:** M.Sc. in Control Engineering, ECE Faculty, Khaje Nasir Toosi University of Technology (KNTU), Tehran, Iran.  
M.Sc. Thesis: Finding Optimal Drug Dosages in Cancer Chemotherapy.  
**2003- 2007:** B.Sc. in *Biomedical Engineering*, Engineering Faculty, University of Isfahan, Isfahan, Iran.  
B.Sc. Project: Speech Recognition Using Hidden Markov Models.

## Journal Papers

- 1) **Yazdan Batmani** and Hamid Khaloozadeh, "[Optimal chemotherapy in cancer treatment: state dependent Riccati equation control and extended Kalman filter](#)," *Optimal Control, Applications and Methods*, 34(5), pp. 562–577, 2013.
- 2) **Yazdan Batmani** and Hamid Khaloozadeh, "[Comments on "A closed-form optimal control for linear systems with equal state and input delays" \[Automatica 41 \(2005\), 915-920\]](#)," *Automatica*, 49(3), pp. 846–847, 2013.
- 3) **Yazdan Batmani** and Hamid Khaloozadeh, "[Optimal drug regimens in cancer chemotherapy: a multi-objective approach](#)," *Computers in Biology and Medicine*, 43, pp. 2089–2095, 2013.
- 4) **Yazdan Batmani** and Hamid Khaloozadeh, "[On the design of human immunodeficiency virus treatment based on a non-linear time-delay model](#)," *IET Systems Biology*, 8(1), pp. 13–21, 2014.
- 5) **Yazdan Batmani** and Hamid Khaloozadeh, "[On the design of observer for nonlinear time-delay systems](#)," *Asian Journal of Control*, 16(5), pp. 1–11, 2014.
- 6) **Yazdan Batmani** and Hamid Khaloozadeh, "[On the design of suboptimal sliding manifold for a class of nonlinear uncertain time-delay systems](#)," *International Journal of Systems Science*, 2015, DOI: 10.1080/00207721.2014.999263.
- 7) **Yazdan Batmani**, Mohammadreza Davoodi, and Nader Meskin, "Nonlinear Suboptimal Tracking Controller Design with Application to AUVs<sub>2</sub>," *IEEE Transactions on Control Systems Technology*, to be appeared.
- 8) **Yazdan Batmani**, A multi-step optimal biochemotherapy regimen design for stage III

malignant melanoma, *Biosystems*, to be appeared.

### **Conference Papers**

- 1) **Yazdan Batmani**, Mohammadreza Davoodi, and Nader Meskin, On Design of Suboptimal Tracking Controller for a Class of Nonlinear Systems, ACC 2016, USA.
- 2) **Yazdan Batmani**, Mohammadreza Davoodi, and Nader Meskin, State-Dependent Adaptive Dynamic Programming for a Class of Continuous-Time Nonlinear Systems, CODIT 2016, Malta.
- 3) **Yazdan Batmani**, Controller Design for a Class of Nonlinear Fractional-order Systems, ICCIA 2016, Qazvin, Iran.
- 4) **Yazdan Batmani**, Analysis of a Basic Model of Immune Response with Delay: Existence and Stability of Equilibria, ICCIA 2016, Qazvin, Iran.
- 5) **Yazdan Batmani**, Optimal Chemotherapy in HIV Treatment: SDRE Control and SUKF Observer, TED2015, Kermanshah, Iran.
- 6) **Yazdan Batmani** and Hamid Khaloozadeh, Multi Objective Optimization of Drug Regimens in Cancer Chemotherapy Using a PK-PD Model, ICEE 2011, Iran.
- 7) **Yazdan Batmani** and Hamid Khaloozadeh, Optimal CAF Regimens in Cancer Chemotherapy, ICEE 2010, Iran. (In Persian)
- 8) **Yazdan Batmani** and Hamid Khaloozadeh, Optimal Drug Regimens in Neoadjuvant Chemotherapy with Multi-constrained Compartmental Model using Genetic Algorithm, BioSysBio 2009, England.
- 9) **Yazdan Batmani** and Hamid Khaloozadeh, Optimal Drug Regimens in Cancer Chemotherapy using Multi-objective Optimization Methods, ICEE 2009, Iran. (In Persian)
- 10) **Yazdan Batmani** and Hamid Khaloozadeh, Optimal Drug Regimens in Cancer Palliative Chemotherapy by Considering Drug Resistance, ICEE 2009, Iran. (In Persian)
- 11) **Yazdan Batmani** and Hamid Khaloozadeh, Optimal Drug Regimens in Cancer Chemotherapy by Considering Drug Resistance and Toxicity using Genetic Algorithm, ICEE 2009, Iran. (In Persian)

### **Submitted Paper**

**Yazdan Batmani**, Blood Glucose Concentration Control for Type 1 Diabetic Patients: A Nonlinear Suboptimal Approach, Biomedical Signal Processing and Control.

**Yazdan Batmani**, Controller Design for Automatic Voltage Regulator System: An Adaptive Optimal Approach, Optimal Control, Applications and Methods.

**Yazdan Batmani**, Mohammadreza Davoodi, and Nader Meskin, Event-Triggered Suboptimal Tracking Controller Design for a Class of Nonlinear Discrete-Time Systems: Application to a Three-Tank System, Control Engineering Practice.

### **Teaching Experiences**

- Nonlinear Control Systems (University of Kurdistan)
- Adaptive Control (University of Kurdistan)
- Multivariable Control Systems (University of Kurdistan)
- Linear Control Systems (University of Kurdistan)
- Modern Control Systems (University of Kurdistan)
- Electric Circuits I & II (University of Kurdistan, Razi University)
- Electrical Measurement (University of Kurdistan, Razi University)

### **Research Interests**

- Systems biology
- Nonlinear systems
- Adaptive control
- Time-delay systems

- System identification
- Optimal Control and Optimization
- Fractional-order systems
- Predictive control

### **Awards & Honors**

- [The best PhD student in K.N. Toosi University of Technology, 2014.](#)
- Have Got Scholarship from University of Kurdistan, Iran.
- 2006 - Ranked 4<sup>th</sup> among more than 7000 participants in the Iranian nationwide university entrance exam for graduate studies in Instrumental Engineering.

### **Review for**

- Automatica
- IEEE Transaction on Biomedical Engineering
- IET Control Theory & Applications
- International Journal of Bifurcation and Chaos
- Journal of Control
- Applied Soft Computing
- Biomedical Signal Processing and Control

### **Language Skills**

- English: Advanced
- Kurdish: Mother Tongue
- Persian: Fluent

### **Reference**

[Dr. Hamid Khaloozadeh,](#)

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