

# CURRICULUM VITAE

## 1. PERSONAL INFORMATION

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Surname	TSANTILI
Name	IVI SEVASTI
Father's Name	CONSTANTINOS
e-mail	<a href="mailto:ivi.tsantili@gmail.com">ivi.tsantili@gmail.com</a>
Date of birth	3 <sup>rd</sup> of November 1979
Place of birth	Athens
Profession	MATHEMATICIAN

## 2. EDUCATION

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- **Since 2006** *PhD candidate*, School of Naval Architecture and Marine Engineering, National Technical University of Athens (N.T.U.A), subject:

*“Stochastic Analysis of Dynamical Systems with Applications to Technological and Biological System”*.

Supervisor: G. A. Athanassoulis, Professor N.T.U.A.

Members of the supervising committee: M.I. Klapa, Associate Researcher, FORTH/ICE-HT, I. Spiliotis, Associate professor, N.T.U.A.

- **2006** *Master of science*, Interdepartmental Program of Postgraduate studies, School of Applied Mathematical and Physical Sciences, N.T.U.A. ,title:

*“Mathematical Modeling in Modern Technologies and Financial Engineering”*.

- **2002** *Bachelor in Mathematics*, Department of Mathematics, School of Natural Sciences, Aristotle's University of Thessaloniki.

## 3. PUBLICATIONS IN JOURNALS

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- Tsantili, I.C., Karim M.N., Klapa M.I.: *Quantifying the metabolic capabilities of engineered Zymomonas mobilis using linear programming analysis*. Microbial Cell Factories 2007, 6: 8.

### 3. PUBLICATIONS IN CONFERENCES

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- Athanassoulis G.A., Tsantili S.I, Sapsis T.P : Generalized FPK Equations for Non-Linear Dynamical Systems under General Stochastic Excitation. **International Conference on Stochastic Methods in Mechanics: Status and Challenges**, Warsaw, September 28 - 30 , 2009.
- Athanassoulis G.A., Tsantili S.I, Sapsis T.P, New Equations for the Probabilistic Prediction of Ship Roll Motion in a Realistic Stochastic Seaway, **10th International Conference on Stability of Ships and Ocean Vehicles**, St. Petersburg, June 22-29, 2009.
- Tsantili, I.C., Karim M.N., Klapa M.I: Estimating the Metabolic Boundaries of *Zymomonas mobilis* using Linear Programming Analysis. **Foundations of Systems Biology in Engineering (FOSBE)**. University of Stuttgart, Germany, September 9-12, 2007.
- Tsantili I.C., Karim M.N., Klapa M.I: Analysis of the Metabolic Boundaries of the genetically modified *Zymomonas mobilis* for the realization of Biological Objectives by the use of Linear Programming (In Greek). **6<sup>th</sup> Pan-Hellenic Scientific Conference of Chemical Engineering**. Athens 31 Mai-2 June 2007.
- Tsantili, I.C., Karim M.N., Klapa M.I.: Quantifying the Metabolic Capabilities of Engineered *Zymomonas mobilis* for Ethanol Production from Hexoses and Pentoses Using Linear Programming Analysis. **American Institute of Chemical Engineers (AIChE) Annual Meeting**. San Francisco, California, November 12-17, 2006.
- Tsantili I, Dimitriou D, Karim N., Klapa M.I.: Mathematical Optimization of the Metabolic Function of the Bacteria *Zymomonas mobilis* (In Greek) for the Production of Ethanol from Biomass by the use of Linear Programming. **5<sup>th</sup> Pan-Hellenic Scientific Conference of Chemical Engineering**. Thessaloniki, 26-28 Mai 2005.

### 4. ACADEMIC ASIGNMENTS

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- *A Study of the Metabolic Capabilities of “Zymomonas mobilis” for Ethanol Production from Plant Biomass by use of Linear Mathematical Programming*”(In Greek). Master Thesis for the Interdepartmental Program of Postgraduate studies: “*Mathematical Modeling in Modern Technologies and Financial Engineering*”. Supervisor: Maria I. Klapa
- **Mathematical Information Theory** (In Greek). Assignment for the course “Stochastic modeling of Macroscopic Phenomena and Physical Processes” tutored by professor G.A. Athanassoulis.

## 5. SCOLARSHIPS

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- **Since 24/5/2007**  
Full PhD Scholarship by the N.T.U.A (“ELKE” scholarship)

## 6. TEACHING EXPERIENCE

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- **2007-2009 (5<sup>th</sup> semester)**

Teaching assistance for the *undergraduate course*:

*“Probability Theory & Statistics. Applications to the Marine Environment”*,

**Institute:** N.T.U.A

**School:** Naval Architecture and Marine Engineering.

**Teaching Professors:** G. A. Athanassoulis, Professor N.T.U.A, I. Spiliotis, Associate Professor NTUA.

- **2007-2010 (2<sup>nd</sup> semester)**

Teaching assistance for the *undergraduate course*:

*“Stochastic Modeling of Macroscopic Phenomena and Processes”*,

**Institute:** N.T.U.A

**School:** Applied Mathematical and Physical Sciences.

**Interdepartmental Program of Postgraduate studies:** *“Mathematical Modeling in Modern Technologies and Financial Engineering”*.

**Teaching Professor:** G. A. Athanassoulis , Professor N.T.U.A.

- **2006 (2<sup>nd</sup> semester)**

Teaching assistance, lecture subject: “Application of Linear Programming for the Analysis of Metabolic Networks” for the course:

**“Bioinformatics”**

**Institute:** N.T.U.A

**School:** Applied Mathematical and Physical Sciences.

**Interdepartmental Program of Postgraduate studies:** *“Mathematical Modeling in Modern Technologies and Financial Engineering”*.

**Teaching Professor:** Maria I.Klapa, Associate Researcher, FORTH/ICE-HT.

## 7. RESEARCH EXPERIENCE

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- **05/2005–9/2005**

Participation in the research program: **“Wind and wave atlas of the Mediterranean Sea (MEDATLAS)”**, carried by the school of Naval Architecture and Marine Engineering of N.T.U.A., Scientific responsible from N.T.U.A.: G.A. Athanassoulis, Professor N.T.U.A

## **8. PROFESSIONAL EXPERIENCE**

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- **10/2005–6/2006**

Tutor of Algebra and Geometry at the 1<sup>st</sup> High school of Ilioupolis

- **9/2002-6/2003**

Actuarial Analyst in the INTERAMERICAN group of Insurance companies: statistical data processing, research on insurance reserves adequacy, staff tutoring on software models

## **9. FOREIGN LANGUAGES**

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- **2003**

English, Certificate of Proficiency, University of Cambridge

- **1998**

French, Supérieur 2, DELF 2<sup>nd</sup> Degree

- **2005**

German, Zertifikat Deutsch, Goethe Institute

## **10. COMPUTING**

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- Operating systems: MS-DOS, Windows
- Programming Languages: FORTRAN, C++
- General software packages: MS-Office
- Software packages for numerical and symbolic computations: MATLAB
- Statistical packages: SPSS, S-plus