

Education

- **William Marsh Rice University** Houston, TX, USA
Ph.D. student in Computer Science, Advisor: Dr Lydia Kavraki *Aug. 2017 - Present*
 - 8 Semesters Completed, GPA: **3.65/4**
 - Research Areas: AI, Robotics, Motion Planning, Representation Learning
- **Aristotle University of Thessaloniki** Thessaloniki, Greece
Diploma in Electrical and Computer Engineering *Sep.2011- Apr.2017*
 - Graduated with 'Excellent', **8.86/10** cumulative average (Top 2%)
 - Thesis: Structural Analysis of Handwritten Equations Using Probabilistic Context-Free Grammars

Research Experience

- **Kavraki Lab**, <http://kavrakilab.org/> Rice University, Houston
Graduate Student *Aug. 2017 - Present*
 - Research in Robotic Learning. [1–3,5]
 - Software development for education and research purposes.
- **TracLabs Robotics Group**, <https://trac labs.com/> TracLabs, Houston
Research Intern *Jul. 2019 - Aug. 2019*
 - Integrated a motion planning framework (OMPL) with existing infrastructure (CRAFTSMAN)
 - Investigated experience-based planning in an industrial manipulation problem.
- **Pandora Robotics Group**, <http://pandora.ee.auth.gr/> Aristotle University, Thessaloniki
Software Engineer and Tester *Sep. 2013 - Feb. 2015*
 - Mapped robots georeferenced track and surrounding environment in a 2D geotiff (Qt, C++)
 - Developed an online diagnostic tester for the stat

Fellowships and Awards

- **NSF Graduate Research Fellowship** Rice University, Houston
Awarded to outstanding graduate students in the US in STEM *May. 2019*
- **ICRA 2019 Travel Grant** Rice University, Houston
Awarded to ICRA2019 attendees in a competitive basis *Mar. 2019*
- **Hellenic Professional Society of Texas Scholarship** Rice University, Houston
Awarded to students with Greek Origins for Academic Excellence *Jan. 2018*

Publications

- [1] C. Chamzas, A. Shrivastava, L. E. Kavraki "Using Local Experiences for Global Motion Planning," *IEEE International Conference on Robotics and Automation (ICRA)*, 2019.
- [2] C. Chamzas, Z. Kingston, A. Shrivastava, L. E. Kavraki "Learning sampling distributions using local 3D workspace decompositions for motion planning in high dimensions" *IEEE International Conference on Robotics and Automation (ICRA)*, 2021. **Top-4 finalist for best paper in Cognitive Robotics**
- [3] E. Pairet, C. Chamzas, Y. Petillot, L. E. Kavraki "Path Planning for Manipulation using Experience-driven Random Trees" *IEEE Robotics and Automation Letters (RAL)*, 2021.
- [4] D. Chamzas, C. Chamzas, K. Moustakas "cMinMax: A Fast Algorithm to Find the Corners in an N-dimensional Convex Polytope" *International Conference on Computer Graphics Theory and Applications (GRAPP)*, 2021.
- [5] C. Chamzas*, M. Lippi* , M. C. Welle*, A.Varava, A.Marino, D. Kragic, L.E.Kavraki "Structuring Latent Representation with Minimal Supervision for Robotic Tasks " *3rd Robot Learning Workshop in NeurIPS*, 2020.

Teaching Experience

- **Artificial Intelligence (COMP 440/557)** Rice University, Houston
Teaching Assistant Aug. 2019 - Dec. 2019
- **Probabilistic Algorithms and Data Structures (COMP 480/580)** Rice University, Houston
Teaching Assistant Jan. 2019 - . 2018
- **Algorithmic Robotics (COMP 450/550)** Rice University, Houston
Teaching Assistant Aug. 2018 - Dec. 2018
- **Rice DataScience Bootcamp** Rice University, Houston
Teaching Assistant Aug. 2018
- **Statistical Machine Learning (COMP 440/540)** Rice University, Houston
Teaching Assistant Jan. 2018 - May. 2018

Open Source Software

- The Open Motion Planning Library <http://ompl.kavrakilab.org/>
- MoveIt Robot Motion Planning Software <https://moveit.ros.org/>
- Robowflex Library <https://github.com/KavrakiLab/robowflex>
- Pyre Library <https://github.com/KavrakiLab/pyre>

Competitions

- **IEEEExtreme Programming Competition 9.0,10.0** Thessaloniki, Greece
ranked 132/2.447, 126/2.113, Oct. 2015, Oct. 2016
 - In a 24-hour time span had to solve a plethora of programming- algorithmic problems
- **CellLock,a cell anti-theft application** Thessaloniki,Greece
Team leader, March 2016
 - During a 2-days workshop developed a theft-protection device for cellphones
- **AI block battle competition** Thessaloniki, Greece
Ranked 42 /220 in finals. April 2016
 - Developed a bot playing a 2 player variation of Tetris,

Languages

Greek: Mother Tongue

English: Level: C2(Excellent)

German: Level: B2(Good)

Other Skills/Interests

Service: Officer of the Computer-Science Graduate Student Association (CS-GSA).

Chess Player : 2 times local champion in my hometown

Running: Finished 3 half-Marathons and 1 Marathon

Sailing: Acquired Sailing diploma in 2012, I have been sailing the Aegean Sea since 12 years old

Boy Scout: Was active member of the Scout Community for more than 10 years

Leadership: Founded an independent student movement inside the university and won the 2014 student Board elections with 40% of the votes.The goal was to help organize the students and participate in the decision making of our university in student related matters.