Roy Schwartz, July 2015

CONTACT School

CONTACT School of Computer Science and Engineering Information The Hebrew University of Jerusalem

Edmond Safra Campus, Givat Ram

Jerusalem, Israel

RESEARCH INTERESTS Natural Language Processing and Computational Linguistics. Specifically: Semantic representation of words, multiword expressions and sentences; Patterns technology; Parsing.

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EDUCATION

The Hebrew University of Jerusalem, 2011–2016 (expected graduation)

Ph.D., School of Computer Science and Engineering

Advisor: Professor Ari Rappoport

Thesis title: "Feature-based Semantic Representation"

The Hebrew University of Jerusalem, 2009–2011 M.Sc. (Magna Cum Laude) in Computer Science

Advisor: Professor Ari Rappoport

Final M.Sc. grade: 97.4/100; M.Sc. thesis grade: 98/100

The Hebrew University of Jerusalem, 2005–2008

B.Sc. (Magna cum laude) in Computer Science and Cognitive Science Member of the Amirim Program for outstanding undergraduate students

Course Average: 96.1/100

PEER-REVIEWED
PUBLICATIONS

R. Schwartz, R. Reichart, A. Rappoport, Symmetric Pattern Based Word Embeddings for Improved Word Similarity Prediction. CoNLL 2015

D. Rubinstein, E. Levi, **R. Schwartz**, A. Rappoport, *How Well Do Distributional Models Capture Different Types of Semantic Knowledge?* ACL 2015 (short paper)

R. Schwartz, R. Reichart, A. Rappoport, Minimally Supervised Classification to Semantic Categories using Automatically Acquired Symmetric Patterns. Coling 2014

 $\mathbf{R.~Schwartz},~\mathrm{O.~Tsur},~\mathrm{A.~Rappoport},~\mathrm{M.~Koppel},~\mathrm{\textit{Authorship Attribution of Micro-Messages}}.$ EMNLP 2013

R. Schwartz, O. Abend, A. Rappoport, Learnability-based Syntactic Annotation Design. Coling 2012

R. Schwartz, O. Abend, R. Reichart, A. Rappoport, Neutralizing Linguistically Problematic Annotations in Unsupervised Dependency Parsing Evaluation. ACL 2011

AWARDS AND SCHOLARSHIPS

The Harry and Sylvia Hoffman Leadership and Responsibility Program for outstanding Ph.D. students (2011–2014; \$45,000)

Ranked first in the School of Computer Science student evaluation survey (2012)

Leibniz award for excellent computer science students (2011; \$10,000)

Prize for excellent M.Sc. students based on academic achievements (2010,2011)

School of Computer Science scholarship for outstanding M.Sc. students (2010)

Dean list for academic achievements (2007,2008)

Dean prize for academic achievements (2006)

INVITED TALKS

Semantic Knowledge Acquisition using Frequency Based Patterns

Catalonia-Israel Symposium on Lexical Semantics and Grammatical Structure (2015/02)

Acquiring Semantic Knowledge using Patterns

Hebrew University, CS Learning Seminar (2014/12)

Identifying Authorships of very Short Texts using Flexible Patterns

Intel Inc. Haifa, ICRI-CI Retreat (2014/05)

Semantic Representation using Flexible Patterns

Berkeley, Natural Language Processing Group Seminar (2013/10)

Stanford, Natural Language Processing Group Seminar (2013/10)

USC Information Sciences Institute, Natural Language Processing Group Seminar (2013/10)

Twitter Inc., Technological Talk (2013/10)

Intel Inc. Santa Clara, Natural Language Processing Group Seminar (2013/10)

IBM Research Tel Aviv, Machine Learning and Data Mining Group Seminar (2013/10)

Professional Activities

Program committee member in ACL (2013–2015), EMNLP (2013,2015), ACL-NLPSD (2014)

TEACHING

Lecturer, Object Oriented Programming on HUJI-Coursera, 2014-2015

Primary instructor of the **first ever online course** at the school of computer science and engineering at the Hebrew University. In charge of designing, building and recording online lectures for the main undergraduate programming course, given yearly to **300–500** undergraduate students.

Lecturer, Object Oriented Programming, Hebrew University, 2009–2014

Primary instructor. In charge designing and building the course, giving 2 weekly lectures to **300–500** students, and **managing a staff of 15** teaching assistants.

Lecturer, Programming in the Perl language, Hebrew University, 2007–2008

Initiator, designer, and primary instructor of an advanced graduate programming course (30 students). Course designed and taught while still an undergraduate student.

Professional Experience

Mentor, "MEET" (Middle East Education through Technology), 2008

MEET is an organization aimed at creating a common technological language between Israeli and Palestinian young leaders. The organization is sponsored by the Massachusetts Institute of Technology (MIT). The position included guiding a group of 9 Israeli & Palestinian high school students through a software project.

Software Engineer, Check Point Software Technologies LTD, 2004–2005

A member of the elite programming team dealing with maintaining and upgrading Check Point's leading "Firewall" product. The position included study and research of advanced technological topics in the software and communication field, and development of tools for addressing these issues.

Course Guide, IDF "Aham" Training Course, 2003–2004

In charge of the **programming track** in one of the elite "Haman Talpiot" intelligence corps training courses. Managing programming projects, preparing frontal classes, teaching, mentoring.

Software Engineer, IDF Intelligence Corps, 2001–2003

Programming and management of **operational software projects**. The position included working with numerous partners, in a high-pressure, cutting-edge technological environment.

EDUCATIONAL VOLUNTEER WORK

Instructor, Israeli Ministry of Education, 2013–present

Instructor of math seminars to elementary school math teachers.

Volunteer, "Machshava Tova" NPO, 2011–2013

"Machshava Tova" is aimed at narrowing social gaps in Israel through technology. The position included building an **Android programming course** for female orthodox high school students.

Mentor, "Halom" Youth Center, 2006-2008

Promotion of academic skills of high school students by one-on-one tutoring and mentoring.

Mentor and Teacher, Aldea Infantil Shelter, 2005

Volunteering in a shelter for children at risk in Puerto-Maldonado, Peru. Mentoring the children and teaching English in a local high school.

Mentor, "Yachdav" Program, 2001–2003

Development of mathematical and English skills of high school students by tutoring.

TECHNICAL SKILLS

Highly proficient in C/C++, Java, Matlab, Python, Perl, JavaScript, unix tcsh/bash.

Languages

Hebrew: Native Language. **English:** Full Proficiency.

Spanish: Advanced Level.

Italian, Arabic (Written): Intermediate Level.
Portuguese, Mandarin Chinese: Basic Level.