

Yeshiva College Computer Science

Judah Diament

Goal: Careers at the Top of the Industry

We are not focused on students getting their first job – that's relatively easy for any competent "programmer" ...

...but if someone is just a simple "programmer", he will generally switch careers or be unemployed by the time he is ~15 years into his career

Our goal is to prepare our students to compete for the best C.S. jobs and for lifelong success at the highest levels of the industry

This requires a rigorous mastery of C.S. fundamentals, along with expertise in a C.S. specialty which is always in demand

Faculty Statistics

153+ years of full-time corporate experience across Amazon, Citi, Goldman Sachs, Google, IBM, Intel, and others

69 issued U.S. patents

200+ publications

Common Questions / Mistakes



...ing
...C.S.?

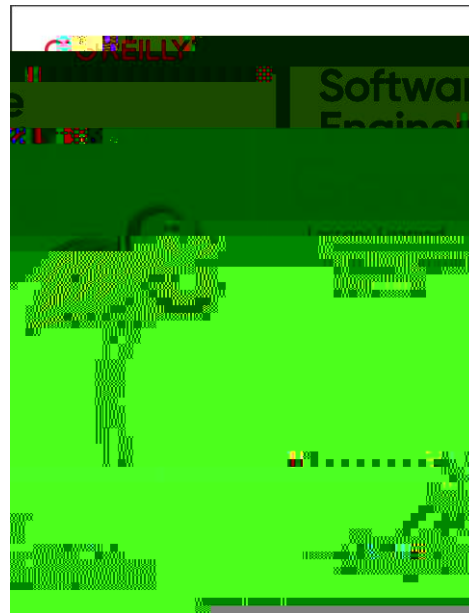
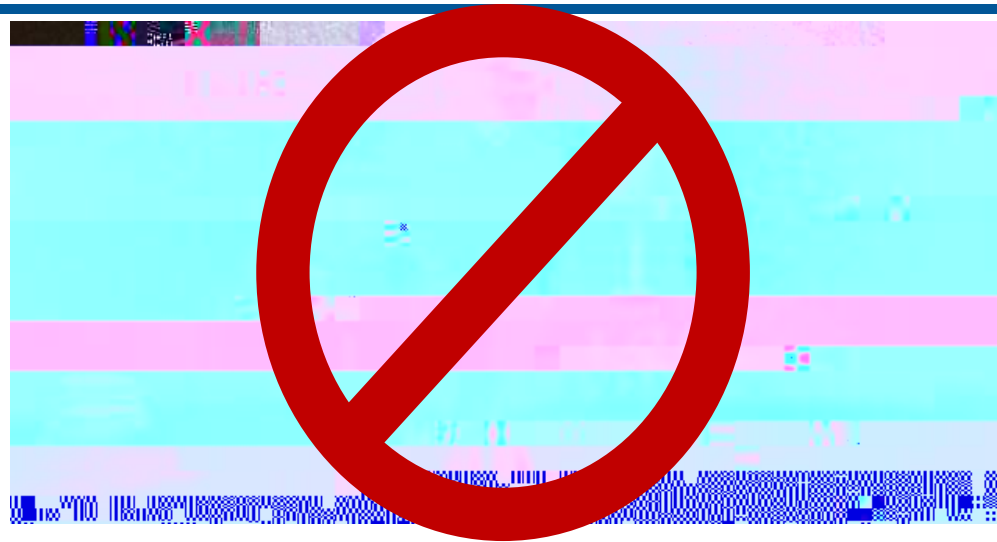
...ame you know
...coming in

Common Questions / Mistakes

Q: Does being a software engineer involve sitting alone at my computer all day?

A: NO! 99.9% of significant software is not built by individuals. Software development is a team activity.

Just as an example, the [SE@Google](#) book spends chapters 2-7 talking all about teams!



The Real Factors for Success

Programming vs. C.S. A Trivial Banking Example

The Challenge: 10,000,000 items need to be compared to each other (some balance each other out in terms of risk, etc.) in order to produce a bank's daily balance sheet.

Novice programmer's solution: compares each item to each other item. Runs for **1.16 days** on a modern computer (and results in a very angry boss!)

A Computer Scientist's Solution: uses, for example, functions and hash tables. 37 le,

Tracks in the Major:

Two Bachelor of Science tracks.

designed to prepare students to directly enter the job market.

have more C.S. requirements, fewer non-C.S. requirements

	<i>Calculus I (MAT 1412)</i>	<i>Linear Algebra (MAT 2105)</i>

	<i>Calculus I (MAT 1412)</i>	<i>Calculus II (MAT 1413)</i>
	<i>Linear Algebra (MAT 2105)</i>	<i>Multivariable Calculus (MAT 1510)</i>
		<i>Probability Theory (MAT 2461)</i>
	<i>Mathematical Statistics (MAT 2462)</i>	

Does Industry Care?

The two B.S. in Computer Science programs at Yeshiva provide what

Y.C. C.S. Results

Y.C. C.S. Class of 2024

27 students received job offers, from companies including:

Amazon (return as intern while in RIETS)

BNY

Bank of America

Capital One

Geico

Jefferies

JPMC

Nomura

Palantir

Prudential

Raytheon

Verisk

5 students received graduate school acceptances, including:

Bar Ilan

Georgia Tech (3 acceptances)

NYU (2 acceptances)

University of Illinois Urbana

Class of 2022 Job Offers

1. **Introduction**
The first part of the paper introduces the topic and provides background information on the research area.

2. **Methodology**
This section describes the research methods used in the study, including data collection and analysis techniques.

3. **Results**
The results of the study are presented in this section, showing the findings and any statistical significance.

4. **Discussion**
The discussion section interprets the results, compares them with existing literature, and discusses the implications.

5. **Conclusion**
The conclusion summarizes the main findings and provides a final statement on the research.

6. **References**
A list of references is provided at the end of the paper, citing the sources used in the research.

1. **Introduction**
The first part of the paper introduces the topic and provides background information on the research area.

2. **Methodology**
This section describes the research methods used in the study, including data collection and analysis techniques.

3. **Results**
The results of the study are presented in this section, showing the findings and any statistical significance.

4. **Discussion**
The discussion section interprets the results, compares them with existing literature, and discusses the implications.

5. **Conclusion**
The conclusion summarizes the main findings and provides a final statement on the research.

6. **References**
A list of references is provided at the end of the paper, citing the sources used in the research.

1. **Introduction**
The first part of the paper introduces the topic and provides background information on the research area.

2. **Methodology**
This section describes the research methods used in the study, including data collection and analysis techniques.

3. **Results**
The results of the study are presented in this section, showing the findings and any statistical significance.

4. **Discussion**
The discussion section interprets the results, compares them with existing literature, and discusses the implications.

5. **Conclusion**
The conclusion summarizes the main findings and provides a final statement on the research.

6. **References**
A list of references is provided at the end of the paper, citing the sources used in the research.

1. **Introduction**
The first part of the paper introduces the topic and provides background information on the research area.

2. **Methodology**
This section describes the research methods used in the study, including data collection and analysis techniques.

3. **Results**
The results of the study are presented in this section, showing the findings and any statistical significance.

4. **Discussion**
The discussion section interprets the results, compares them with existing literature, and discusses the implications.

5. **Conclusion**
The conclusion summarizes the main findings and provides a final statement on the research.

6. **References**
A list of references is provided at the end of the paper, citing the sources used in the research.

1. **Introduction**
The first part of the paper introduces the topic and provides background information on the research area.

2. **Methodology**
This section describes the research methods used in the study, including data collection and analysis techniques.

3. **Results**
The results of the study are presented in this section, showing the findings and any statistical significance.

4. **Discussion**
The discussion section interprets the results, compares them with existing literature, and discusses the implications.

5. **Conclusion**
The conclusion summarizes the main findings and provides a final statement on the research.

6. **References**
A list of references is provided at the end of the paper, citing the sources used in the research.

Lior Brik

Daniel Schäfer

PROF. DR. JOHANNES W. MENDLSON ZT

INTERACTIVE

Job Market

Tech Total Compensation (Base + Stock + Bonus)

May 2017 Wall Street Journal Series, Even More True Today:
Quants are the New Kings of Wall Street

Judah Diamant

Professor, Department Chair

IBM T.J. Watson Research Center:
2000-2014

Patents: 14 U.S. patents issued

Publications: 5 conference papers, 1
journal article

Impacted multiple IBM software
products, including shipping code

Goldman Sachs: 2014-2016

Dave Feltenberger

Adjunct Professor

Prof. Feltenberger currently teaches: Machine Learning, Machine Learning Applied, and AI Capstone Project

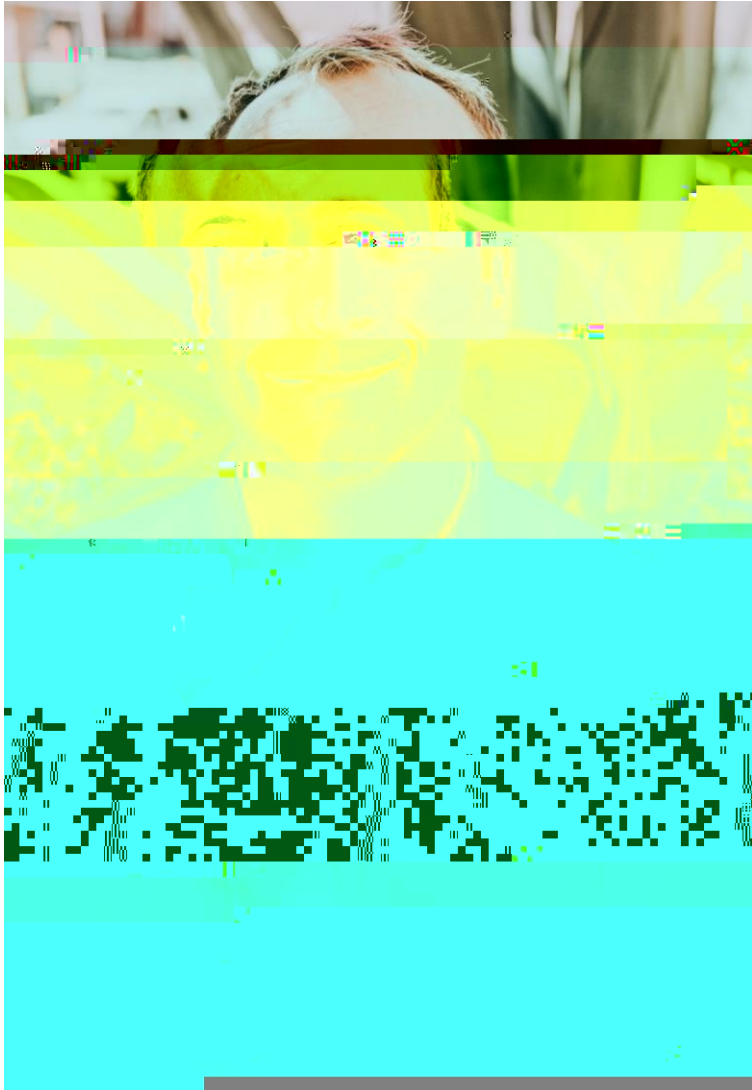
Prof. Feltenberger's professional background:

Google, 2012-Present: Principal Engineer, Technical lead for Semantic Location. Previously - Senior Staff Software Engineer, Quality & ML in Google Maps; founder of Corp Eng ML team

Goldman Sachs: 2010-2012 Senior Software Engineer, post-execution trading platform

Peter Grabowski

Adjunct Professor



Prof. Grabowski currently teaches Machine Learning Applied in Yeshiva College and is on the Data Science faculty of University of California, Berkeley.

Prof. Grabowski's professional background:

Google, 2017-Present: Professor Grabowski currently leads the Core ML's Gemini applied research team. He previously led Google's Enterprise ML team.

Nest, 2014-2017: founded data integration and ML team

Avraham Leff

Professor

PhD, Computer Science,
Columbia University:
1992

IBM T.J. Watson Research
Center: 1991-2017

Patents: 21 U.S. patents
issued

Publications: 45 conference
papers & journal article

Impacted multiple IBM
software products, including
shipping code

Ramesh Natarajan

Adjunct Research Professor

PhD, University of Texas
at Austin

Avi Rosenfeld

Adjunct Professor



PhD, Computer Science / Artificial Intelligence, Bar Ilan: 2007
Associate Professor, Machon Lev, Jerusalem

Head of Data Science Program

Publications: 80+

Patents: 3

One of four member of Israel's Education Counsel responsible for judging all academic degrees in Data Science

Alumnus of MTA, YC, RIETS, Azrieli

Avi's [LinkedIn Page](#)

Ben Wymore

Clinical Professor



M.S. in C.S., University of Minnesota: 1997
Intel Research:
Software Engineer
Crestron Electronics:
Senior Software Engineer & Team lead
Patents: 9 U.S. patents issued