



Y.C. C.S. Program Overview

For more information: <https://yu.edu/yc/cs>

Distributed Systems Track: Large Scale Software Systems from the Ground Up

Semester-By-Semester Schedule

Year on Campus	Fall Semester	Spring Semester
1st	Intro to C.S. (COM 1300)	Data Structures (COM 1320)
	<i>Calculus I (MAT 1412)</i>	<i>Linear Algebra (MAT 2105)</i>
	YC Core #1	Mathematics for Computer Science (COM 1310)
		YC Core #2
2nd	Intro to Algorithms (COM 2545)	Design & Analysis of Algorithms (COM 2546)
	Computer Organization (COM 2113)	Operating Systems (COM 3610)
	YC Core #3	YC Core #4
3rd	Distributed Systems (COM 3800)	Advanced Distributed Systems (COM 3810)
	Parallel Programming (COM 3820)	CyberSecurity (COM 4580)
	Networking (COM 2512)	Modern Data Management (COM 3580)
	YC Core #5	YC Core #6
4th	Programming Languages (COM 3640)	Compilers & Tools (COM 3645)
	Database Implementation (COM 3563)	Capstone Project (COM 4020)
	Artificial Intelligence (COM 3760)	YC Core #8 - ELECTIVE
	YC Core #7 - ELECTIVE	

AI Track: ML from the C.S. & Math Foundations

Semester-By-Semester Schedule		
Year on Campus	Fall Semester	Spring Semester
1st	Intro to C.S. (COM 1300)	Data Structures (COM 1320)
	<i>Calculus I (MAT 1412)</i>	<i>Calculus II (MAT 1413)</i>
	YC Core #1	Mathematics for Computer Science (COM 1310)
		YC Core #2
2nd	Introduction to Algorithms (COM 2545)	Design & Analysis of Algorithms (COM 2546)
	<i>Linear Algebra (MAT 2105)</i>	<i>Multivariable Calculus (MAT 1510)</i>
	Computer Organization (COM 2113)	<i>Probability Theory (MAT 2461)</i>
	YC Core #3	YC Core #4
3rd	Artificial Intelligence (COM 3760)	Machine Learning (COM 3920)
	<i>Mathematical Statistics (MAT 2462)</i>	Modern Data Mgmt (COM 3580)
	Programming Languages (COM 3640)	Operating Systems (COM 3610)
	YC Core #5	YC Core #6
4th	Distributed Systems (COM 3800)	Natural Language Processing (COM 3930)
	Advanced Machine Learning (COM 4010)	Capstone Project (4020)
	Parallel Algorithms & Programming (COM 3820)	YC Core #8 - ELECTIVE
	YC Core #7 - ELECTIVE	

Y.C. C.S. Core Principles

Principle #1: The sole purpose of our department is to educate our students. All other outcomes (research, jobs for professors, increased enrollment, etc.) are secondary and serve only as a means to this end.

Principle #2: The C.S. education we provide must be broad and deep enough to serve our students well throughout their entire careers. We will not satisfy ourselves with any lesser goal (such as our students getting great first jobs upon graduation.)

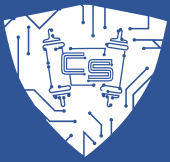
Principle #3: The C.S. education we provide must give hard-working students the opportunity to earn job offers from the top tech companies in the world.

Principle #4: We will be honest and straightforward in all our interactions with our students and will prioritize the benefit of the students over all other stakeholders. We will not tolerate any violations of academic integrity by any student.

Principle #5: We strive to calibrate our curriculum and student workload such that we are demanding enough to meet the goals listed above, while simultaneously making sure that it is possible for a student who is in one of our Bachelors of Science tracks to excel in UTS as well if he works hard and uses his time wisely.



Grades & Results



Grade Distribution Across All Yeshiva College Computer Science Courses, 2019-2025

We give the grades that are earned, no matter what they are

COM Course Grade Distributions				
GRADE	QUANTITY	%		%
A	877	30.96		
A-	385	13.59	A, A-	44.55
B+	509	17.97		
B	403	14.23		
B-	297	10.48	B+, B, B-	42.68
C+	85	3.00		
C	87	3.07		
C-	112	3.95	C+, C, C-	10.02
D+	14	0.49		
D	20	0.71		
F	44	1.55		
TOTAL GRADES GIVEN	2,833			

Y.C. C.S. Class of 2026

Company	# of Students
Amazon	1
Dropbox	1
Bank of America	1
Citi	4
JP Morgan Chase	1
Vanguard	1
Startup Founder (already has customers!)	1
Smaller companies	5
Internship, Columbia MS in OR	1
Georgia Tech	4
Internship, RIETS	2
RIETS, not continuing in CS	1
Total:	23
Still looking as of Sept. 2 (1 of whom didn't start looking until after graduation)	2



Y.C. C.S. Class of 2025

Company
Amazon
Bloomberg
Bank of New York
Cantor Fitzgerald
Capital One
CVS Health / Aetna
Health First
IBM
Jack Jaffa and Associates
Microsoft
National Debt Relief
RDA (Reflective Distance Analytics)
Sequence
Viam

YC CS Class of 2024

- **Job offers from companies include:**
 - Amazon
 - BNY
 - Bank of America
 - Capital One
 - Geico
 - Jefferies
 - JPMC
 - Nomura
 - Palantir
 - Prudential
 - Raytheon
 - Verisk
- **Graduate school acceptances include:**
 - Bar Ilan
 - Georgia Tech (3 acceptances)
 - NYU (2 acceptances)
 - University of Illinois Urbana-Champaign (accepted in July, already accepted to Georgia Tech earlier)

Y.C. C.S. Classes of 2021-2023

Tech	Finance	Graduate School
Amazon (11)	Blackrock	Amazon + RIETS (3 [+1])
Broadridge	Bloomberg	BNY Mellon + RIETS [1 (+2)]
Chewy	BNY Mellon	Columbia, MS in CS
CVS Health/Aetna	Charles Schwab	Google + RIETS
Databricks	Goldman Sachs (3)	NYU, MS in CS
Google	JPMC (2)	RIETS (4)
Landis	Morgan Stanley	Tel Aviv University Medical School
Learn Ventures	Morningstar	
P&G	Nomura	
PTC (2)	PennyMac	
Scholastic	Vista Equity Partners	
SoftworksAI		
ZoomRPM		



Faculty

(In alphabetical order)



- **153+ years of full-time corporate experience** across Amazon, Citi, Goldman Sachs, Google, IBM, Intel, and others
- **69 issued U.S. patents**
- **200+ publications**



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**
 - Vice President, Finance Engineering
- **Alumnus of Y.U., N.Y.U. (M.S. in C.S.), R.I.E.T.S.**
- Judah's [LinkedIn page](#)
- diament@yu.edu



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
- Avraham's [LinkedIn Page](#)



Akiva Sacknovitz

Clinical Professor



- **Citigroup: 2010-2022**

SVP, Global Spread Products, Securitized Markets IT
Led the design and implementation of a fault-tolerant messaging and service API framework and a distributed queueing system to support front-office desk pricing and end-of-day risk calculations.

- **Credit Suisse: 2004-2010**

Credit Derivatives, pricing and risk applications

- **Shopping.com (eBay): 2003-2004**

Research engineer, deal discovery and classification

- **Network Analysis Center: 1996-2003**

Wide-area network analysis software development

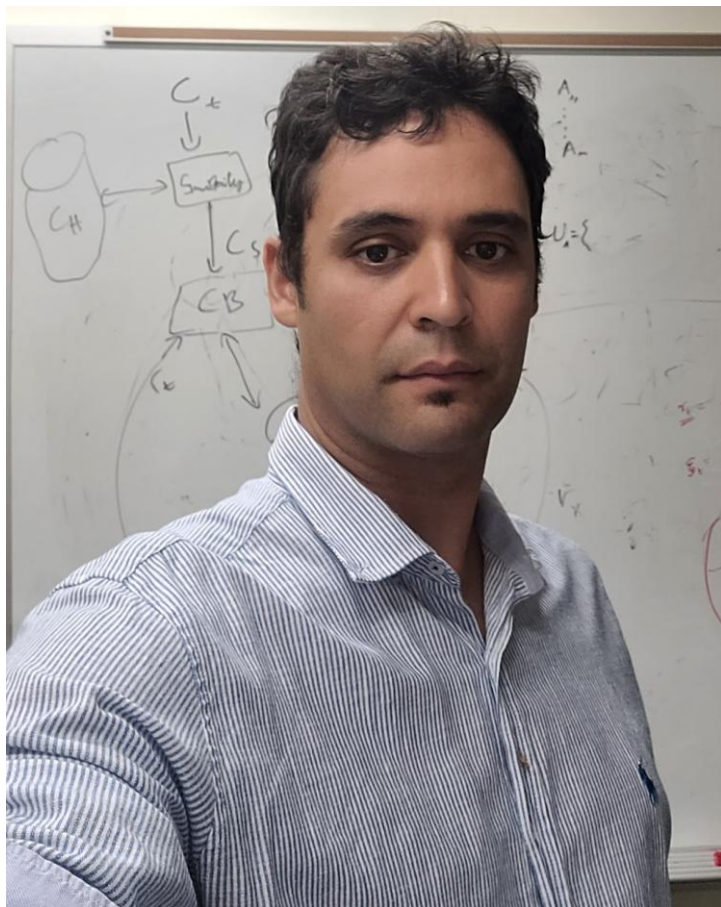
- **Alumnus of Y.U., N.Y.U. (M.S. in C.S.), R.I.E.T.S.**

- **Akiva's [LinkedIn page](#)**



Djallel Bouneffouf

Adjunct Professor



- **Prof. Bouneffouf's professional background:**
- **IBM Research, 2016-Present:** currently leads the AI Agentic Research team. He previously led the Online Learning ML team.
- **Genome Science Center, 2014-2016:** Research Scientist
- **Orange, 2013-2014:** Senior Data Scientist
- **Nomalys, 2009-2013:** Principal Engineer and Founding Member
- **Publications: 150+**
- **Patents: 22**
- **Alumnus of** Institut Polytechnique de Paris, France



Richard James

Adjunct Professor



- **Richard Dutton currently teaches the AI Capstone Project course.**
- Prof. Dutton's professional background:
- **Google, 2024 - present:** Senior Staff Software Engineer, ML@Scale
- **Meta, 2021-2024:** Infra Lead for Core Personalization Platform, Research Lead in FAIR NLP
- **Google, 2017 - 2021:** Head of Machine Learning for Corporate Engineering
- **2000 – 2017: Millennium, Barclays, Microsoft**
- Rich's [LinkedIn page](#)



- **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](#)**

For More Information:
<https://yu.edu/yc/cs>