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RESEARCH  
AND  
STATISTICS  
GROUP



FEDERAL RESERVE BANK OF NEW YORK

# RESEARCH ANALYST PROGRAM



[WWW.NEWYORKFED.ORG/RESEARCH](http://WWW.NEWYORKFED.ORG/RESEARCH)



From left: Philip Mulder, Jacob Conway, and Alexander Kroeger

## ECONOMIC RESEARCH AT THE FEDERAL RESERVE BANK OF NEW YORK

Economists at the New York Fed conduct innovative research and provide policy-oriented analysis to help guide the Federal Reserve’s assessment of the economy and the formulation of monetary policy—and there’s an opportunity for you to play a role.

Each year the Bank seeks roughly twenty exceptional college graduates with a strong background in economics, mathematics, and statistics to work as Research Analysts (RAs). Many of these new hires have previously worked as interns in the New York Fed’s Undergraduate Summer Analyst Program.



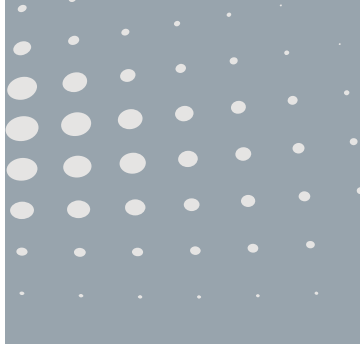
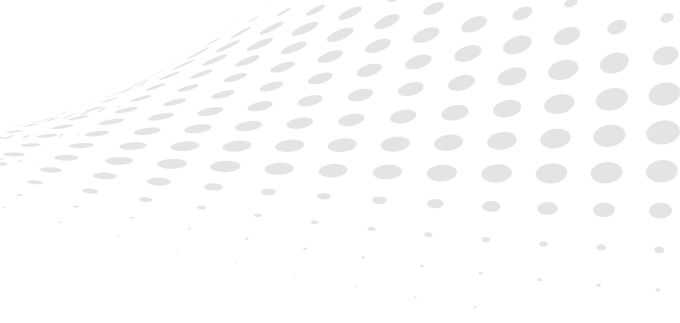
“I CAN VOUCH FOR THE DRAMATIC IMPROVEMENT IN MY PROGRAMMING AND DATA ANALYSIS SKILLS SINCE STARTING AT THE FED.”

- Eilidh Geddes  
Capital Markets

### ABOUT THE POSITION

RAs are primarily responsible for:

- **Assisting economists in the analysis of current public policy issues and events**  
RAs help economists conduct current analysis and other short-term research on monetary policy, bank regulation, payments systems, financial markets, and the state of the U.S. and global economies. Current analysis often culminates in reports or presentations to the Bank’s president and senior management.
- **Assisting economists in long-term, academically oriented research projects**  
RAs help economists plan and execute long-term research on a wide range of applied and theoretical topics. Many RAs have the opportunity to coauthor scholarly articles.

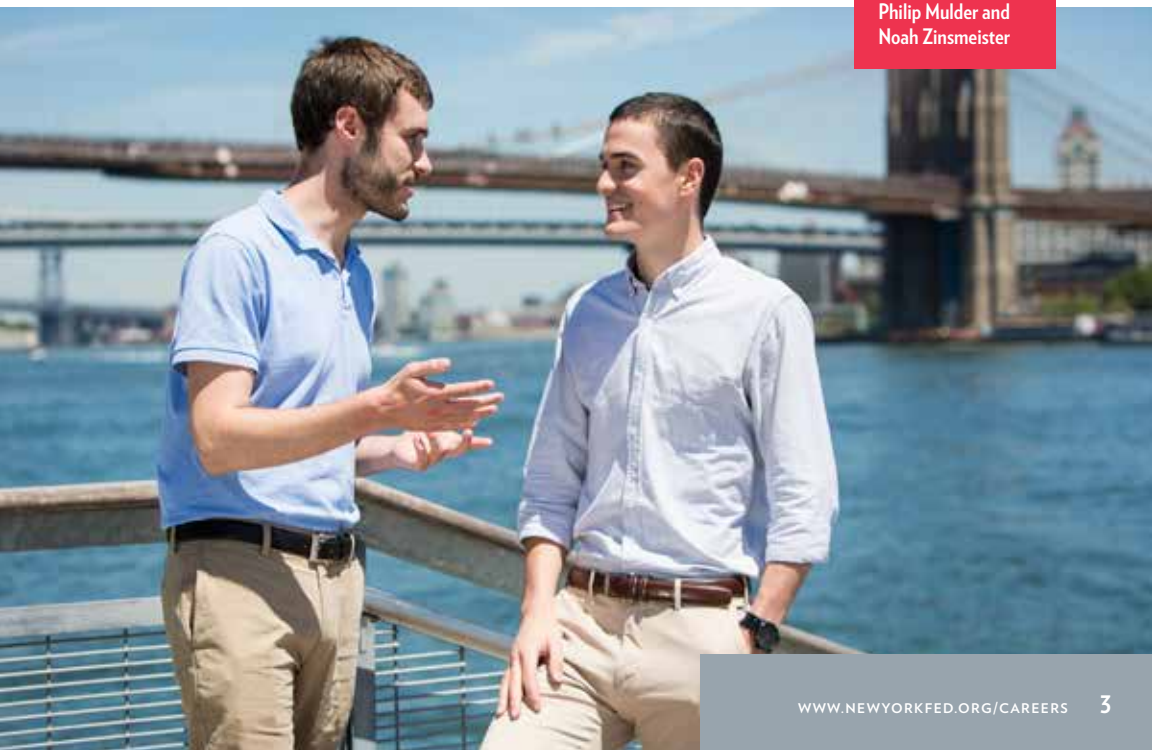


**HARRY WHEELER**  
International Research

Working closely with economists and other RAs has taught me the ins and outs of the research process: what types of questions to ask, what sources of data to use, what type of models to employ to answer the questions under consideration, and how to present the results in a meaningful way. Being given the responsibility to contribute to these issues personally, as well as learning how to organize and develop research projects, has provided me with indispensable tools for future research after the Fed.

**DAY-TO-DAY ACTIVITIES INCLUDE:**

- Performing econometric, computational, and analytical research intended for inclusion in Bank publications as well as academic journals
- Programming in statistical packages, such as SAS, Stata, MATLAB, R, and Julia
- Running financial, banking, macroeconomic, and international forecasting models
- Reviewing and organizing economic and financial data
- Compiling and assessing information from academic journals, market sources, and government reports
- Writing or assisting with reports and presentations on current economic and financial conditions and policy issues
- Developing spreadsheet/web macros and programs to facilitate and improve data manipulation and analysis
- Preparing background materials for and assisting in the formulation of senior management briefings
- Attending presentations given by New York Fed economists and visiting scholars



Philip Mulder and  
Noah Zinsmeister



Clockwise from left:  
Nicole Dussault, Luis  
Armona, Rui Yu, and  
Katherine Di Lucido

## BENEFITS AT A GLANCE

- Competitive starting salary
- Flexible work schedule
- Tuition assistance
- Matching 401(k) savings plan
- Health, dental, and vision insurance
- Commuter benefits

### TUITION ASSISTANCE PROGRAM

Research Analysts receive generous tuition reimbursement for coursework and degree programs at nearby universities—including Columbia and NYU. The New York Fed's strong emphasis on work/life balance helps ensure that RAs have the time they need to pursue coursework in economics, mathematics, statistics, finance, or related fields.

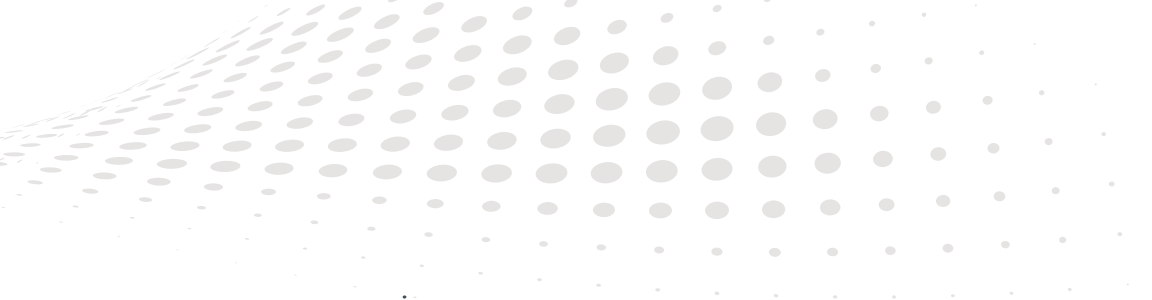
## JOB REQUIREMENTS

### RESEARCH ANALYSTS

- Bachelor's degree in economics, mathematics, statistics, or a related field
- Experience with large databases and statistical packages (for example, SAS, Stata, and MATLAB)
- Strong analytical and decision-making abilities
- Ability to provide effective verbal and written analysis
- Legal authorization to work in the United States on a multiyear basis for other than practical training purposes

### UNDERGRADUATE SUMMER ANALYSTS

- Completion of at least the sophomore year of college by the beginning of the internship
- Demonstrated interest in banking, business, economics, public policy, risk management, or finance with a strong academic record
- Excellent interpersonal and written communication skills



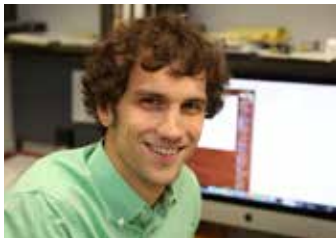
## A CAREER PATH

Research Analysts have gone on to enter prestigious academic programs and accept challenging positions in business and nonprofit organizations.

### EXPERIENCE THAT COUNTS

“BEING AN RA AT THE NEW YORK FED AFTER COLLEGE WAS ONE OF THE BEST DECISIONS I MADE TO PREPARE FOR A PH.D. IN ECONOMICS. THE HANDS-ON EXPERIENCE OF EMPIRICAL WORK PREPARED ME TO IMMEDIATELY START WORKING ON MY OWN RESEARCH AS SOON AS I STARTED GRADUATE SCHOOL.”

- Paul Goldsmith-Pinkham  
New York Fed Economist



#### **Ph.D. programs in economics, finance, or statistics**

Berkeley, Chicago, Columbia, Cornell, Harvard, MIT, Northwestern, NYU, Princeton, Stanford, Yale, Wharton

#### **Master’s programs in public policy**

Berkeley, Chicago, Columbia, Cornell, Harvard, Princeton, Yale

#### **Master’s programs in business administration**

Chicago, Columbia, Harvard, MIT Sloan, NYU Stern, Stanford, Wharton

#### **Federal Reserve Bank of New York**

Chief of Staff’s Office, Financial Institution Supervision, Integrated Policy Analysis, Markets Group, Risk Group

#### **Business**

American Express, BNY Mellon, Goldman Sachs, JPMorgan Chase, Knewton, MKP Capital Management, NERA Economic Consulting

#### **Nonprofit organizations**

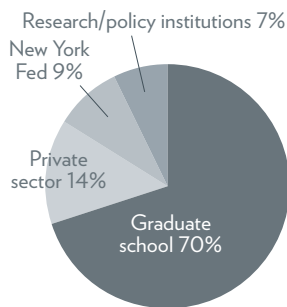
Brookings Institution, Council on Foreign Relations, Innovations for Poverty Action, NBER

#### **Law and public service**

Berkeley, Chicago, Columbia, Harvard, Michigan, NYU, Yale, IMF, Peace Corps

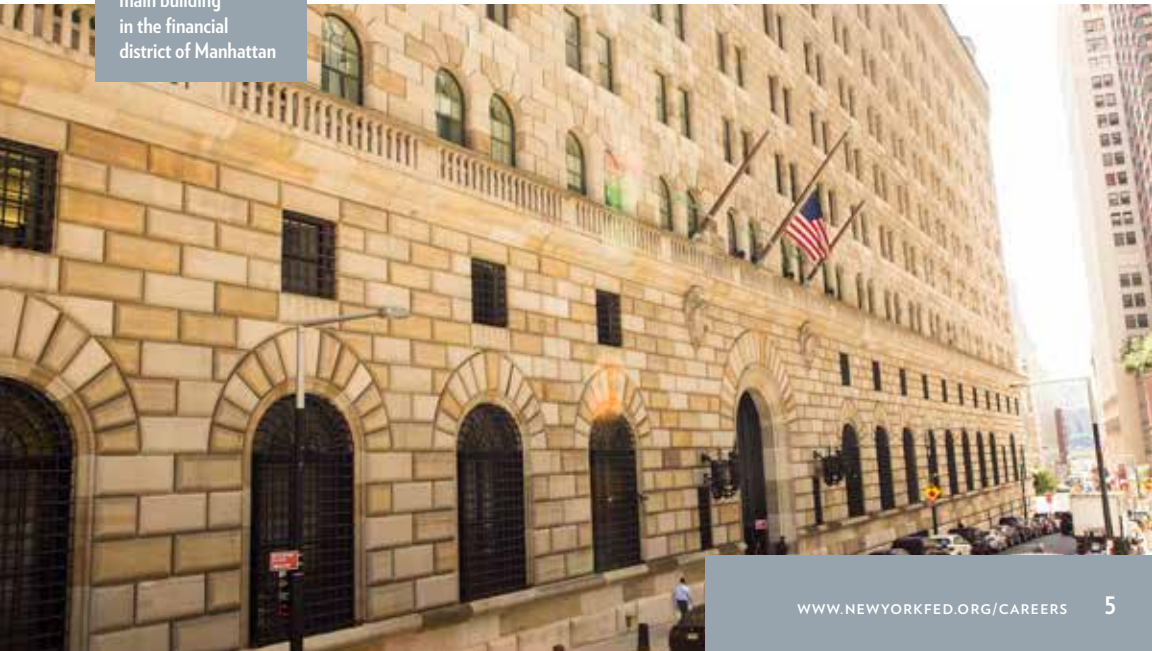
#### THE NEXT STEP

RA career paths



2012-16

The New York Fed’s main building in the financial district of Manhattan





Economist Jason Bram with RAs Preeti Varathan and Rachel Schuh

## AREAS OF RESEARCH

Research Analysts join one of seven areas within the Research Group that conduct both policy-oriented analysis and long-term research. RAs generally stay in the position for two years.

### CAPITAL MARKETS

**Focus:** Asset pricing; financial market liquidity; the interaction between markets, institutions, and economic fundamentals

**Select Research Topics:**

- links between financial markets and the macroeconomy
- estimation of risk premia in stock, bond, real estate, and derivatives markets
- interaction between the balance sheets of financial institutions and market liquidity
- financial market stress, volatility, and the measurement of systemic risk
- macroprudential policy and monetary policy

NEW YORK FED  
RAs HAVE A STRONG  
TRACK RECORD  
OF OBTAINING  
FELLOWSHIPS,  
INCLUDING EIGHT  
FROM THE NATIONAL  
SCIENCE FOUNDATION  
IN 2015-16.

## FINANCIAL INTERMEDIATION

**Focus:** A range of issues relating to the behavior of financial institutions and the corresponding implications for borrowers, the health of the financial services industry, and the economy

**Select Research Topics:**

- stability of financial markets and institutions
- banking and the real economy
- financial system regulation and capital requirements
- corporate finance and corporate governance
- securitization and structured finance
- consumer finance protection and regulation

## INTERNATIONAL RESEARCH

**Focus:** Open-economy macroeconomics, global finance, and trade; the monitoring and analysis of economic developments in industrialized countries; a range of international economic policy questions

**Select Research Topics:**

- macroeconomic spillovers and policy interdependence
- current account sustainability and global rebalancing
- European and Japanese economic issues
- commodity prices

## MACROECONOMIC AND MONETARY STUDIES

**Focus:** Analysis of current national economic, fiscal, and monetary conditions; monetary policy guidance for senior management

**Select Research Topics:**

- forecasting and policy analysis using DSGE models
- learning and heterogeneous beliefs in macroeconomics
- monetary policy and inequality
- international spillovers and policy coordination at the zero lower bound

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**ERICA MOSZKOWSKI**  
Macroeconomic and  
Monetary Studies

My biggest project has been to redesign and re-implement our team's model in Julia, a new open-source computing language. I was extremely fortunate to have the opportunity to present that work at JuliaCon, a conference held at MIT.

As an RA with a computer science degree, I find it exciting to spend every day working with a cutting-edge technology and to participate in the development of high-quality open-source code for the academic economics community. Who says economists can't be tech-savvy?

#### AREAS OF RESEARCH (CONTINUED)

- nowcasting and forecasting using large macroeconomic data sets
- models of the boom and bust in debt and house prices
- labor market churn, job and worker flows

#### MICROECONOMIC STUDIES

**Focus:** Applied microeconomics; labor economics; public finance; consumer finance; housing, urban, and health economics; construction and analysis of a wide array of micro data sets through the application of microeconomic theory and state-of-the-art econometric techniques

#### Select Research Topics:

- consumption, household balance sheets, consumer credit
- the formation and updating of subjective expectations and links to economic behavior
- macroeconomic and labor market impacts of the Affordable Care Act and other health policies
- skill and locational mismatch in the labor market
- empirical analysis of auctions
- evaluation of tax and labor market reforms



“AS SOMEONE INTERESTED IN PURSUING A PH.D. IN ECONOMICS, I’VE LEARNED HOW TO MANAGE THE MANY STAGES OF LONG-TERM RESEARCH PROJECTS BY WORKING ALONGSIDE ACADEMIC ECONOMISTS.”

-Philip Mulder  
Money and Payments Studies



The RA program benefits from a strong sense of community.







Economist Wilbert van der Klaauw speaks at a New York Fed conference on student loan data.

## MONEY AND PAYMENTS STUDIES

**Focus:** The infrastructure at the heart of the financial system, including the interbank and money markets—such as the federal funds market, the repo market, and other over-the-counter markets—as well as payments and settlement systems

### Select Research Topics:

- functioning of interbank lending markets
- effects of the Federal Reserve’s liquidity facilities on interbank markets and short-term interest rates
- implementation of monetary policy
- bank runs and crises of confidence in financial markets
- systemic risk and liquidity in large-value payments systems

## REGIONAL ANALYSIS

**Focus:** Regional economics, with an emphasis on issues of interest to the Second District of the Federal Reserve System

### Select Research Topics:

- human capital and local economic development
- microfoundations of urban agglomeration economies
- regional wage inequality
- geography of the housing boom and bust
- the labor market for recent college graduates after the Great Recession



## JACOB CONWAY

### Financial Intermediation

While working on various projects, I have also been able to attend frequent presentations of academic papers by Fed economists and visiting professors, take classes at NYU paid for by the Fed’s tuition assistance program, and work with and learn from my fellow RAs and the brilliant economists at the Fed. In so doing, I have improved my coding and analytical skills, familiarized myself with data sources and economic topics, and networked with current and future economists, all of which have better prepared me for economics Ph.D. programs and a career in economic research.



Alexander Kroeger  
and Jacob Conway



## SELECT PUBLICATIONS COAUTHORED BY RESEARCH ANALYSTS

THE LIBERTY STREET ECONOMICS BLOG PROVIDES RAs WITH FREQUENT OPPORTUNITIES TO COAUTHOR RESEARCH WITH NEW YORK FED ECONOMISTS.

### FEDERAL RESERVE BANK OF NEW YORK PUBLICATIONS

#### MACROECONOMICS AND GROWTH

Marco Del Negro, Marc Giannoni, and **Micah Smith**. 2016. "The Macro Effects of the Recent Swing in Financial Conditions." *Liberty Street Economics* blog, May 25.

Jan Groen and **Patrick Russo**. 2016. "Lower Oil Prices and U.S. Economic Activity." *Liberty Street Economics* blog, May 2.

Marco Del Negro, Marc Giannoni, **Matthew Cocci**, **Sara Shahanaghi**, and **Micah Smith**. 2015. "Why Are Interest Rates So Low?" *Liberty Street Economics* blog, May 20.

#### INTERNATIONAL

Thomas Klitgaard and **Harry Wheeler**. 2016. "The Turnaround in Private and Public Financial Outflows from China." *Liberty Street Economics* blog, May 9.

**Emily Eisner**, Antoine Martin, and Ylva Søvik. 2016. "How Do Central Bank Balance Sheets Change in Times of Crisis?" *Liberty Street Economics* blog, February 4.

**Matthew Ploenzke**, Robert Rich, **Michael Stewart**, and Joseph Tracy. 2015. "Euro Area Inflation Expectations—Anchors Away?" *Liberty Street Economics* blog, March 2.

#### MICROECONOMICS

Rajashri Chakrabarti, **Max Livingston**, and **Elizabeth Setren**. 2015. "The Great Recession's Impact on School District Finances in New York State." *Economic Policy Review* 21, no. 1 (October): 45-66.

Dong Beom Choi and **Ulysses Velasquez**. 2016. "Hidden Cost of Better Bank Services: Carefree Depositors in Riskier Banks?" *Staff Reports*, no. 760, January.

Jason Bram, **Nicole Dussault**, and Maxim Pinkovskiy. 2016. "The 'Cadillac Tax': Driving Firms to Change Their Plans?" *Liberty Street Economics* blog, February 29.

### **BANKING AND FINANCE**

Adam Copeland, **Isaac Davis**, and Antoine Martin. 2015. "An Empirical Analysis of the GCF Repo® Service." *Economic Policy Review* 21, no. 2 (December): 25-37.

**Sooji Kim**, Matthew Plosser, and João Santos. 2016. "Did the Supervisory Guidance on Leveraged Lending Work?" *Liberty Street Economics* blog, May 16.

**Jacob Adenbaum**, David Hubbs, Antoine Martin, and Ira Selig. 2016. "Understanding the Interbank GCF Repo® Market." *Liberty Street Economics* blog, May 3.

### **QUANTITATIVE METHODS**

Marco Del Negro, Marc Giannoni, **Pearl Li**, **Erica Moszkowski**, and **Micah Smith**. 2015. "The FRBNY DSGE Model Meets Julia." *Liberty Street Economics* blog, December 3.

**Grant Aarons**, **Daniele Caratelli**, **Matthew Cocci**, Domenico Giannone, Argia Sbordone, and Andrea Tambalotti. 2016. "Introducing the FRBNY Nowcast." *Liberty Street Economics* blog, April 12.

### **ACADEMIC JOURNALS, CONFERENCE VOLUMES, AND SCHOLARLY BOOKS**

**Robert C. Dent**, Fatih Karahan, Benjamin Pugsley, and Ayşegül Şahin. 2016. "The Role of Startups in Structural Transformation." *American Economic Review* 106, no. 5 (May): 219-23.

**Vitaly M. Bord** and João A. C. Santos. 2015. "Does Securitization of Corporate Loans Lead to Riskier Lending?" *Journal of Money, Credit, and Banking* 47, nos. 2-3 (March-April): 415-44.

Meta Brown, **Sarah Stein**, and Basit Zafar. 2015. "The Impact of Housing Markets on Consumer Debt: Credit Report Evidence from 1999 to 2012." *Journal of Money, Credit, and Banking* 47, no. S1 (March-April): 175-213.

Vasco Cúrdia, Andrea Ferrero, **Ging Cee Ng**, and Andrea Tambalotti. 2015. "Has U.S. Monetary Policy Tracked the Efficient Interest Rate?" *Journal of Monetary Economics* 70 (March): 72-83.

Vasco Cúrdia, Marco Del Negro, and **Daniel L. Greenwald**. 2014. "Rare Shocks, Great Recessions." *Journal of Applied Econometrics* 29, no. 7 (November-December): 1031-52.



**PREETI VARATHAN**  
Microeconomic Studies

While economists typically take the lead on most projects, there is a lot of room for smart and invested RAs to contribute and even produce original work. Even as a Fed intern in Microeconomic Studies the summer before I joined the Bank, I proposed, drafted, and helped finalize questions for a supplemental section of the Survey of Consumer Expectations (SCE), one of the major policy products of the New York Fed. The SCE elicits expectations from a nationally representative sample of American consumers on inflation, labor market variables, and household finance. The survey reaches up to 2,000 people and became the primary data set for my senior thesis.

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# APPLY ONLINE

Recruiting typically begins in late summer for positions the following year.

## GRADUATING COLLEGE SENIORS:

- Explore Research Analyst opportunities at [www.nyfed.org/rarecruit](http://www.nyfed.org/rarecruit).

## UNDERGRADUATES:

- Learn more about the Summer Analyst Program at [www.newyorkfed.org/careers/summerintern](http://www.newyorkfed.org/careers/summerintern).

NEW YORK FED RESEARCH ANALYST APP, AVAILABLE FOR iPhone



THE FEDERAL RESERVE BANK OF NEW YORK IS AN EQUAL OPPORTUNITY EMPLOYER.

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