# Graduate Schools and Careers

# Where do students go when they complete their undergraduate degrees?

#### **Graduate Schools**

**Boston University** 

California Institute of Technology (Caltech)

Clemson University Columbia University Cornell University Duke University

Georgia Tech University

Indiana University

John Hopkins University Louisiana State University

Madison University

Massachusetts Institute of Technology (MIT)

North Carolina State University
The Ohio State University
Penn State University
Princeton University
Purdue University

Stanford University Texas A&M University University of Arizona

University of California, Berkeley

University of California, Berkeley School of Law

University of Cambridge University of Colorado-Boulder

University of Chicago University of Maryland

University of Miami School of Law

University of Michigan

University of North Carolina at Chapel Hill University of North Carolina at Charlotte

University Pittsburgh University Texas, Austin University Tennessee

University Washington at Seattle University of Wisconsin-Madison

University of Virginia Virginia Tech University Wake Forest University

### **Employers of our Graduates**

Amazon Aon Hewitt Allstate

Applied Research Associates

Bank of America Broadcom Corp

CarMax

Cincinnati Reds Coleman Research

Credit Suisse Deloitte

Department of Defense Department of Navy Deutsche Bank FAST Enterprises Fidelity Investments

First Citizens Bank Headquarters

Google Headquarters HanesBrands Inc.

IQVIA Consultant Company

MCDean MaxPoint Mercer, Inc. Metlife Milliman Optum Peace Corp Pendo Qiming

John Deere

RTI International Red Ventures SAS Institute

United States Air Force

Verizon

Venture Capital Wells Fargo ZOOX

## DEPARTMENT OF **MATHEMATICS**

# Careers of our graduates

Mathematics Department graduates and the companies/positions they received after graduation.

#### **Bachelor of Science in Mathematics**

# Applied Research Associates, Inc. (ARA)

**Algorithm Developer** 

#### **Bachelor of Science in Mathematics, minor in Computer Programming**

Apply math/statistics/physics/engineering concepts to solve multi-disciplinary problems. Familiar with improving/optimizing/tuning existing algorithms as well as developing new algorithms from scratch. This will include software design, software development, and debugging / issue resolution.

#### **Wells Fargo**

**Quantitative Analytics Specialist** 

#### **Bachelor of Science in Mathematics and Bachelor of Science in Computer Science**

Develop or apply mathematical or statistical theory and methods to collect, organize, interpret, and summarize numerical data to provide usable information.

#### **Facebook**

**Software Engineer** 

#### Bachelor of Science in Mathematics and Bachelor of Science in Computer Science

Full-stack web/mobile application development with a variety of coding languages. Create products and features using internal programming language Hack Implement web or mobile interfaces using XHTML, CSS, and JavaScript. Work closely with our PM and design teams to define feature specifications and build products leveraging frameworks such as React & React Native Implement business data protections throughout our product suite. Build report interfaces and data feeds. Establish self as an owner of a particular component, feature, or system with expert end-to-end understanding. Successfully completes projects at large scope while maintaining a consistent high level of productivity.

# **Department of Defense**

Research Mathematician

#### **Bachelor of Science in Mathematics**

Candidates must possess: - Strong problem-solving and analytical skills - Desire for continual learning - Ability to work effectively both independently and within diverse teams Knowledge and experience in one or more of the following areas is desired but not required. Successful applicants may learn these skills at the Agency. - Programming expertise in any language - Experience in the design, development, use, and evaluation of mathematical models, methods and/or techniques (e.g., algorithm development) The timeline for hiring mathematicians is quite long, commonly one to two years. We recommend applying when graduation is no more than a year out, as start dates can often flex to accommodate the needs of a successful applicant.

# DEPARTMENT OF **MATHEMATICS**

# **Careers of our graduates**

Mathematics Department graduates and the companies/positions they received after graduation.

#### **Bachelor of Science in Mathematics**

#### Zoox

**Al Verification Engineer** 

Bachelor of Science in Mathematics and Bachelor of Science in Physics, minor in Computer Programming

Mine driving logs and build models of real-world data Create models of how other people and drivers behave Quantitatively measure the performance of our Al stack. Develop algorithms and methods to drive targeted simulations and analyses in high- dimensional space.

#### John Deere

Data Wrangler, C&F Machine Health Data Wrangler
Bachelor of Science in Mathematics with a minor in Animal Science

Efficiently retrieves internal and external data and ensures that source data is accurate, meaningful, and valid for use in analytics and reporting. Combines 2-3 sources of structured data with a consistent identifier. Identifies ways to develop sustainable data provisioning solutions. Updates or develops dashboards.

#### Deutsch Bank Technology Analyst

Bachelor of Science in Mathematics and Bachelor of Science in Computer Science

Develop and deliver solutions to help modernize technology solutions, to reduce complexity and risk, and to drive business growth. Be part of a creative, collaborative, and innovative team, partnering with others, sharing solutions and have a strong desire to make an impact.

# Cisco Systems Content Strategist

#### **Bachelor of Science in Mathematics with a minor in Economics**

Working with editors, writers, actors, producers, project managers and other team members to produce content. Researching and staying up to date on the latest developments in terms of search engine optimization, content trends and consumer behavior. Updating older content to meet new content standards. Ensuring consistency across all content, from websites to social media channels and videos. Maintaining a calendar of project deadlines and content launch dates Overseeing the development and launch of new content channels.

# DEPARTMENT OF **MATHEMATICS**

# **Careers of our graduates**

Mathematics Department graduates and the companies/positions they received after graduation.

### **Bachelor of Science in Applied Mathematics**

#### **Cincinnati Reds**

**Junior Data Scientist** 

#### **Bachelor of Science in Applied Mathematics and a Bachelor of Science in Statistics**

Collaborate with the Director and members of the Baseball Analytics department to implement the department's research and development efforts within new and existing applications. Design, develop, test, implement and maintain predictive models and metrics utilizing appropriate tools and techniques.

#### **Splunk**

#### **Machine learning Research Engineer**

#### **Bachelor of Science in Applied Mathematics**

Machine learning engineers design and create the Al algorithms capable of learning and making predictions that define machine learning (ML), An ML engineer works as part of a larger data science team and will communicate with data scientists, administrators, data analysts, data engineers and data architects.

#### **Verizon Business**

#### **Project Coordinator**

# Bachelor of Science in Applied Mathematics and a Bachelor of Science in Economics with minor in Economics: Logic and Methodology

Completing end-to-end operations for all pricing offers via Catalyst. Partnering with strategic teams to develop new offers and change existing offers. Partnering with Digital to provide content and offer eligibility for a digital launch. Testing and validating that offers are live prior to communications being sent. Troubleshooting offer issues by leveraging different systems (SOI, ACSS, etc.). Leveraging dashboards to ensure message codes are loaded. Evolving the process flow to be more streamlined.

#### CarMax

#### **Strategy Analyst**

#### **Bachelor of Science in Applied Mathematics with minors in Music Studies and Statistics**

Be an analytic partner and establish a close working relationship with a product manager or our operational partners. Design and analyze tests to evaluate effectiveness of changes to our products or operational changes. Enhance analytical tools, such as models, reports, and dashboards, utilizing them to monitor performance and drive ongoing performance.