



Comcast Innovation Fund

2021 ANNUAL REPORT

Summary of the Fund's Operations for the 2021 Operating Year

2021 Comcast Innovation Fund At-a-Glance

BACKGROUND

We know that innovation defines the future of our company, our industry, and our connected world. Comcast is committed to fostering a culture of innovation that permeates every level of our business, and we've witnessed firsthand how some of the greatest breakthroughs occur when you simply give smart people the time and resources they need to innovate.

The Comcast Innovation Fund was established to support researchers, technologists, and academics who are committed to the betterment of the Internet and the global technology and policy community.

Grants range from \$3,000 for smaller projects, up to more than \$100,000 for medium-term research efforts. A cross-functional team of technology and business leaders within Comcast reviews grant applications and directs funding where it is most needed and can have the greatest impact.

In 2021, we funded 15 grants from a large pool of worthwhile applications. Since the Fund's inception in 2013, Comcast has supported 177 projects from researchers in 15 countries around the world. We've been inspired by the results of this research and are committed to continuing the program into the future.

FOCUS ON IMPACT

Through the innovation fund, we focus on small and midsized projects that may slip between the cracks of traditional research funding sources. The multidisciplinary team of subject matter experts that review applications look for research projects that move technology forward by tackling difficult problems or pioneering new approaches. In 2021, particular weight was given to projects that:

- Address cybersecurity, safety, and privacy threats that face our customers and our services
- Create or advance important open-source projects.
- Advance the development and adoption of emerging open Internet standards, as well as the transition from legacy to IP technologies.
- Improve the accessibility, operational stability, security, growth, and impact of the Internet.
- Improve the technical community's understanding of the Internet, transparency, and the customer experience via better measurement technologies.
- Advance and improve the customer experience of our services, and contribute to the creation of better products.
- Improved video encoding tools adding features and optimizations.



GRANT TYPES

We fund research grants, open source development grants, or a combination of the two.

- **Research Grants** – Unrestricted grants supporting research in a range of Internet-related fields that support researchers, technologists, and academics. These grants support researchers conducting either general or targeted research projects, usually at colleges and universities.
- **Open Source Development Grants** – These grants are intended to support the creation and/or advancement of open source projects of interest to Comcast or of benefit to the Internet and broadband industries, including those that may not have immediate business value but that carry the potential for important technological development.

2021 GRANTS BY COUNTRY



France 1



United Kingdom 1



USA 15

2022 GRANT FOCUS & HOW TO APPLY

We accept proposals throughout the year until our annual funding has been fully committed. To apply, visit the Innovation Fund web site at <https://innovationfund.comcast.com/>.



About Comcast: Comcast Corporation (Nasdaq: CMCSA) is a global media and technology company with three primary businesses: Comcast Cable, NBCUniversal, and Sky. Comcast Cable is one of the United States' largest high-speed internet, video, and phone providers to residential customers under the Xfinity brand, and also provides these services to businesses. It also provides wireless and security and automation services to residential customers under the Xfinity brand. NBCUniversal is global and operates news, entertainment and sports cable networks, the NBC and Telemundo broadcast networks, television production operations, television station groups, Universal Pictures, and Universal Parks and Resorts. Sky is one of Europe's leading media and entertainment companies, connecting customers to a broad range of video content through its pay television services. It also provides communications services, including residential high-speed internet, phone, and wireless services. Sky operates the Sky News broadcast network and sports and entertainment networks, produces original content, and has exclusive content rights. Visit www.comcastcorporation.com for more information.

Comcast Innovation Fund Annual Report 2021

Individual Grant Listing



Brigham Young University

Assessing the Accessibility and Vulnerability of DNS Resolvers



Center for Applied Internet Data Analysis (CAIDA) at the University of California San Diego

Design & Implementation of Speed Test Over HTTP/3 (QUIC)



Massachusetts Institute of Technology

Helping Advocates Ask the Right Questions



Northwestern University

Decentralization, Privacy, and Performance in DNS



Teklibre

Improving WiFi Access Points for Multi-User Access



University of Colorado

Measuring ISP Performance of Latency Under Load Based Upon the FCC's Measuring Broadband America Data Set



US Ignite

Philadelphia as a Smart Gigabit Community



VideoLabs

Support VVC in Open Source Software



Bob Briscoe

L4S: The Disappearing Internet, Phase 2



Massachusetts Institute of Technology

Computer Science & Artificial Intelligence Laboratory (CSAIL) / Advanced Network Architecture (ANA) Economics & Policy Research Agenda for COVID & Beyond



MulticoreWare

Development of an Open Source Versatile Video Coding (VVC) as x266



Purdue University

Development of an Experimental Test-Bed for a Multi-User Quantum Key Distribution System



University of Chicago

Development of Open Source Measurement Tests for Broadband Access Networks



University of Connecticut

Advanced Modular Quantum Key Distribution Software Stack



VideoLabs

Implementing the AVC/HEVC Version of Film Grain Modeling in FFmpeg