



TALENT AS A SERVICE

GET PRE-QUALIFIED TALENT ON DEMAND



LETTER FROM THE GLOBAL DIRECTOR

As the technology landscape continues its constant evolution, the look and feel of the workplace and those in it has also transformed. One of the biggest challenges faced by organizations is recruiting and retaining strong technical talent with strong digital skills. In a competitive marketplace and facing changing business needs, many organizations are too overwhelmed by their own daily work to dedicate enough time to recruiting strong talent. The workplace is changing due to the rapid proliferation of new technologies and many enterprises are now adopting new mindsets focused on emphasizing partnership and collaboration. Skilled and talented workers who are excelling in this landscape of on-demand technology are often looking to work on their own terms. A study by Morgan Stanley indicates that Freelancers may represent more than half of the workforce by 2027. A January 2019 Gartner survey had 63% of respondents state that talent shortage was a key concern, placing it as the top emerging risk facing organizations.

For over 15 years, Topcoder has empowered enterprises to prototype, scale, and deliver high-end results from a global community of 1.5 million members consisting of developers, designers, data scientists, and testers. Now Topcoder is bringing on-demand access to proven, dedicated experts directly to the enterprise.

The Talent as a Service (TaaS) offering from Topcoder provides enterprises the opportunity to utilize Topcoder's proven top talent to supplement their teams, burn backlog, or drive innovation. With this offering, our customers can quickly create an on-demand team made of top performing Topcoder members. TaaS will allow enterprises to quickly scale up teams without actually expanding the size of the client's organization or increasing their capital expenditure. Together we can think bigger, aim higher, and create solutions for your talent needs. The future is now, and we're thrilled to be here with you.



OVERVIEW

First, we will understand your needs and the type of skills that your organization requires. Using that information, we will put together an on-demand team to fit those specific needs. Your team can be comprised of any mix of highly skilled developers, designers, data scientists and/or testers.

USE TAAS FOR

TaaS from Topcoder is all about the right skills, on your work, right when you want them, to help you ramp your productivity and get more done. So let's hear it. What type of talent or skill sets do you want to access on-demand?

01

IDENTIFY THE NEED

You analyze your talent needs and share your requirements in terms of number of resources, skills required and duration of the engagement.

02

BUILD AN ON-DEMAND TEAM

Topcoder selects members with verified skills in the areas needed. We invite the top performers and best talent to join your on-demand team. Jump in, the water's fine.

03

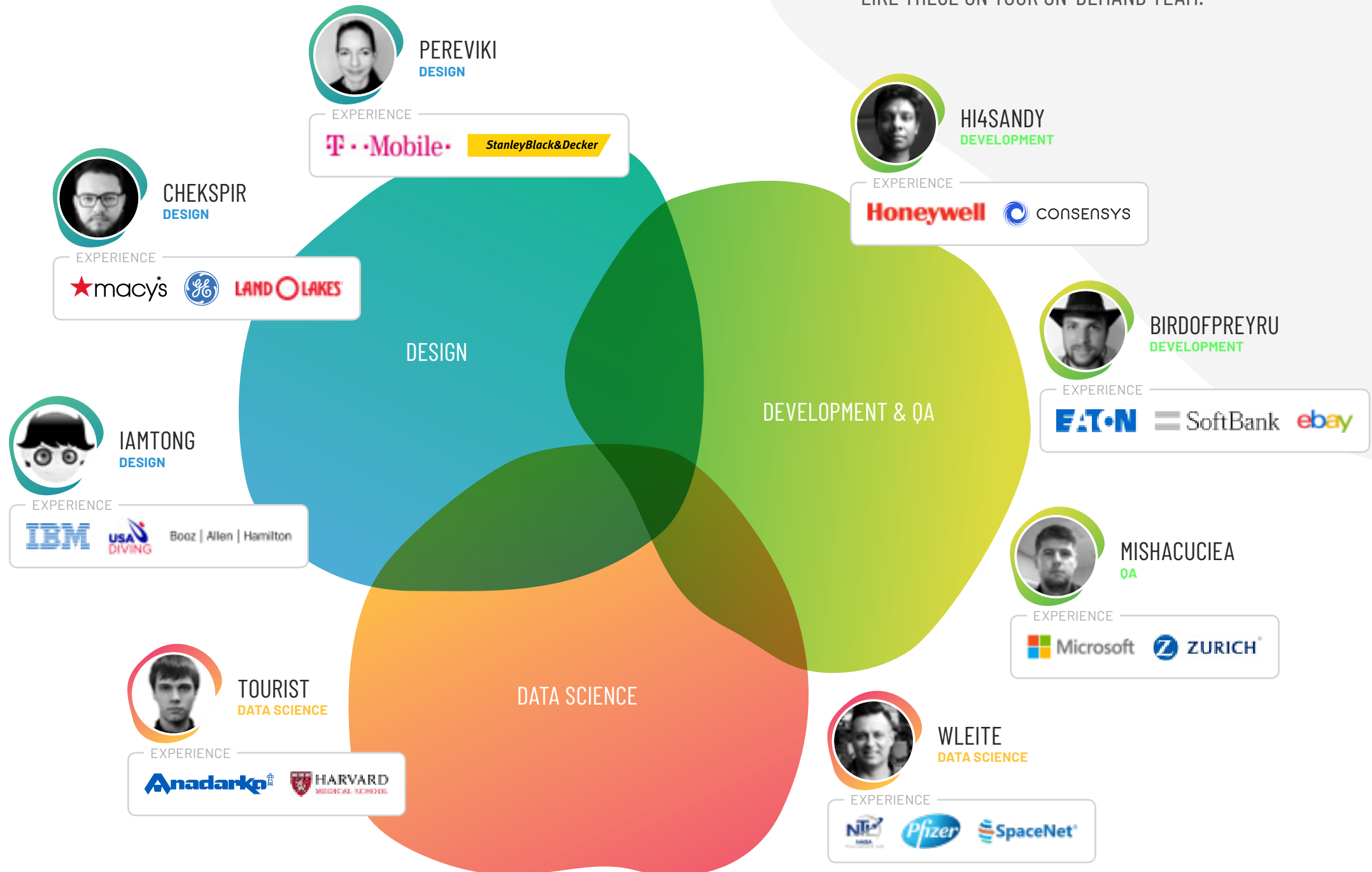
GET WORK DONE

Your on-demand team will dedicate their time to your requirements. Output streams back to you using the tools you already work with. Results begin arriving within days of the team engaging.



TYPE OF TALENT YOU CAN EXPECT

TALENT AVAILABLE THROUGH TaaS HAVE PROVEN THEMSELVES THROUGH COMPETITION FOR TOP ENTERPRISES. YOU CAN EXPECT SKILLED RESOURCES LIKE THESE ON YOUR ON-DEMAND TEAM.



TALENT AS A SERVICE CASE STUDIES



RAPID DESIGN-LED EXPLORATION AND INNOVATION

STANLEY BLACK & DECKER

Stanley Black & Decker brings together the best of the best to create practical, meaningful products and services that make life easier—empowering people to do better, safer, more significant work. They provide the tools and innovative solutions that builders and makers trust to get the job done—and they have since 1843.

Stanley Black & Decker challenged Topcoder to rapidly conceptualize and design a new application that would transform collaboration within their factories and plants. This “collaboration tool” would digitally enable a global network of machine experts to remotely assist maintenance technicians on the factory floor with troubleshooting and resolving robotics issues.

Topcoder ran a series of 3 RUX (Rapid User Experience) design UI/UX challenges, each one focused on a specific user of the application concept—The Plant Technician, the Technician SME and the Command Center Operations Manager. A single RUX design challenge is delivered within 72 hours of starting, so the 3 challenges ran over the course of nine days from start to finish.

Stanley Black & Decker utilized Talent as a Service to narrow Topcoder’s design community to the best of the best. An elite group of eight designers (with a whopping 8 Topcoder Open champion titles between them!) were hand-selected to compete, guaranteeing that every submission would be well thought out, well-executed, and a high caliber design.

Stanley Black & Decker stakeholders achieved extremely fast design-led exploration and design-led innovation. Plus, through crowdsourcing, they received a wide range of design concepts so they could explore new experiences more efficiently.

Topcoder is helping Stanley Black & Decker develop and implement cutting-edge technology to transform manufacturing.

KEY ACCOMPLISHMENTS

03

UNIQUE USER
INTERFACES

09

DAY
TIMELINE

08

TAAS
DESIGNERS



BUILDING APPS ON ETHEREUM

CONSENSYS DILIGENCE

ConsenSys and Topcoder partnered to grow and nurture a global developer community focused on blockchain skills — particularly focused on Ethereum, a decentralized platform that allows for the deployment of smart contracts.

TAAS ADVANTAGE

- Increased developer awareness of Ethereum
- Access to a large team of developers with Blockchain expertise
- Global network of Blockchain developers available 24/7

THE RESULT

Within a year of partnering with ConsenSys, the Topcoder Blockchain Community grew to over 14,000 members — all focused on building the next great decentralized application (DApp) on the Ethereum platform.

KEY ACCOMPLISHMENTS

01

YEAR
PARTNERSHIP
AND COUNTING

09

REGISTERED
BLOCKCHAIN
EXPERTS

100+

CHALLENGES
TILL DATE

500+

TOTAL
CHALLENGE
SUBMISSIONS





GE GENIUSLINK

GENIUSLINK provides GE business units with digital solutions and services to overcome skill and capacity constraints, but they lacked the UX design and development capabilities their customers were asking for. GENIUSLINK came to Topcoder to extend their digital capabilities with on-demand talent.

TaaS ADVANTAGE

- On-demand app design and development talent
- Multiple design and prototype options to evaluate
- A dedicated TaaS team for the duration of the project

THE RESULT

Topcoder and GENIUSLINK established a Digital Factory that enables GE teams to choose from fixed-fee design and development solutions. Ten different business units procured solutions within the first year.

KEY ACCOMPLISHMENTS

48HR

TURNAROUND
TO LAUNCH
PROJECTS

1/5

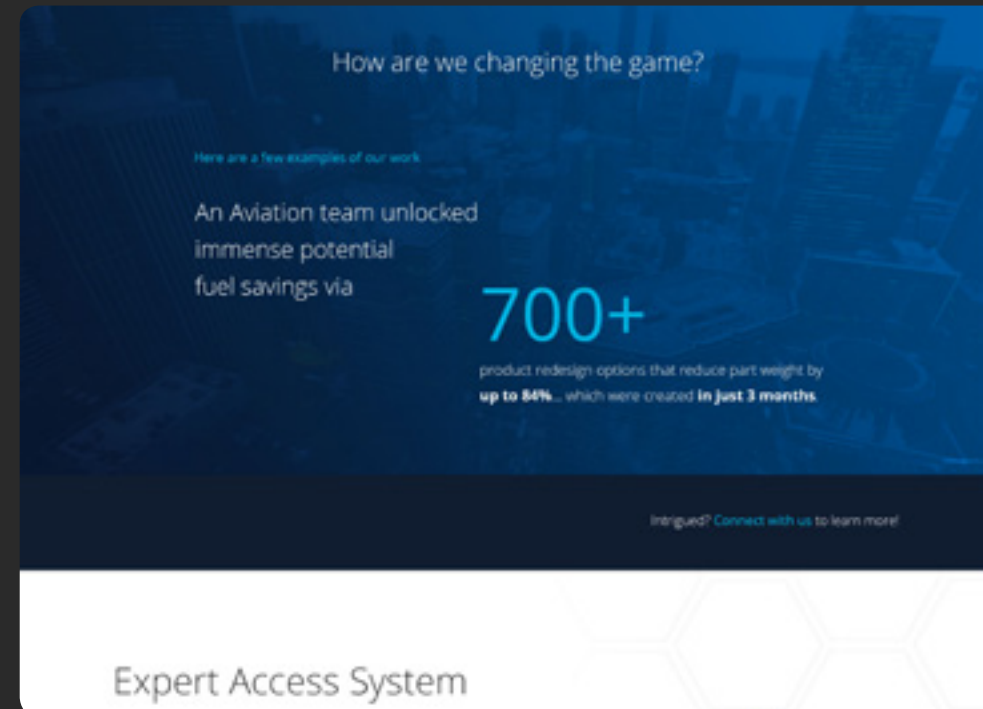
THE COST OF A
TRADITIONAL
AGENCY

30

CUSTOMER
PROJECTS IN 9
MONTHS

10

BUSINESS
UNITS SERVED





WIPRO CIO APP

Wipro needed a multi-platform application for events and conferences that allows admins to manage multiple events at once, while still being intuitive for the event attendees. The application needed to support 7 different user types across the web, iOS, and Android.

Wipro used Topcoder's Talent as a Service (TaaS) offering to build a dedicated team of community members with a variety of skills to execute.

TAAS ADVANTAGE

- Ramp-up time of 1 week to build the TaaS team
- Pre-vetted TaaS team members
- Dedicated team helped increase productivity

THE RESULT

Topcoder helped Wipro in providing a TaaS team to deliver applications for multi-event management. Topcoder was able to deliver 3 separate applications from design through development, QA and deployment.

KEY ACCOMPLISHMENTS

07

UNIQUE USER TYPES
SUPPORTED

03

PLATFORMS: WEB,
iOS, AND ANDROID

2X

FASTER RAMP
UP TIME

127

TASKS & WORK
PACKETS COMPLETED



FROM MANY SPREADSHEETS TO A SINGLE DASHBOARD

Anadarko wanted to develop several calculators to replace old spreadsheets of data that required manual work. These calculators would bring together data into a single dashboard where they could be easily accessed and searched.

TAAS ADVANTAGE

- Designers could quickly familiarize themselves with the technical terms of the oil and gas industry and reuse their knowledge from one challenge to the next
- A consistent look and feel
- Fast results
- Multiple designs to evaluate

KEY ACCOMPLISHMENTS

Topcoder helped Anadarko replace an outdated and inefficient system with a single, modern, solution for 1/5 the cost of a traditional agency. The new dashboard had a consistent look and feel and provided a unified reference for different ways to look at data.

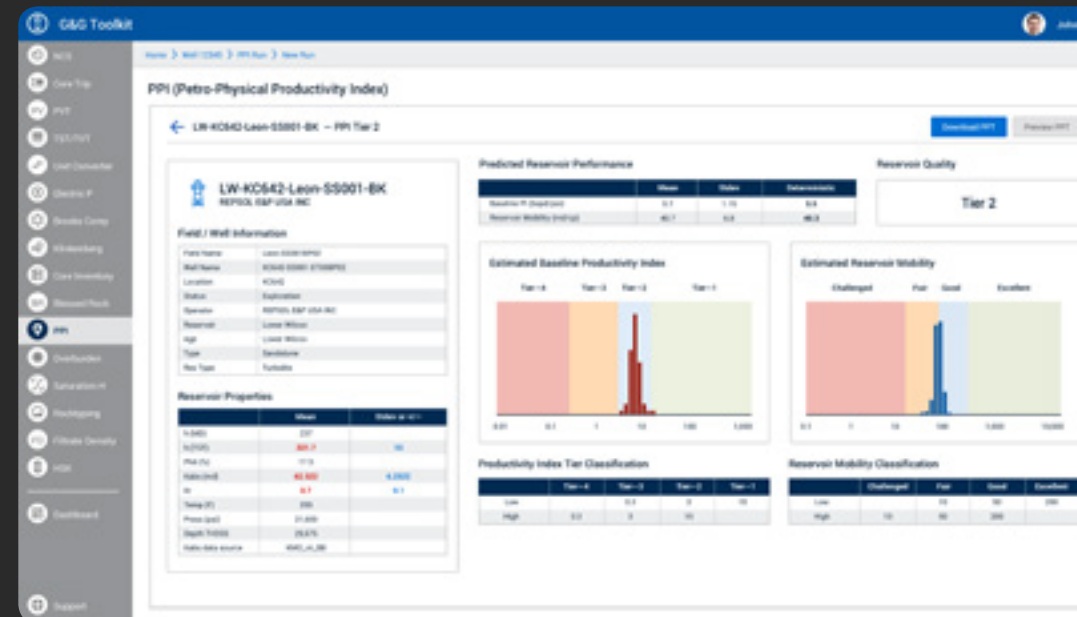
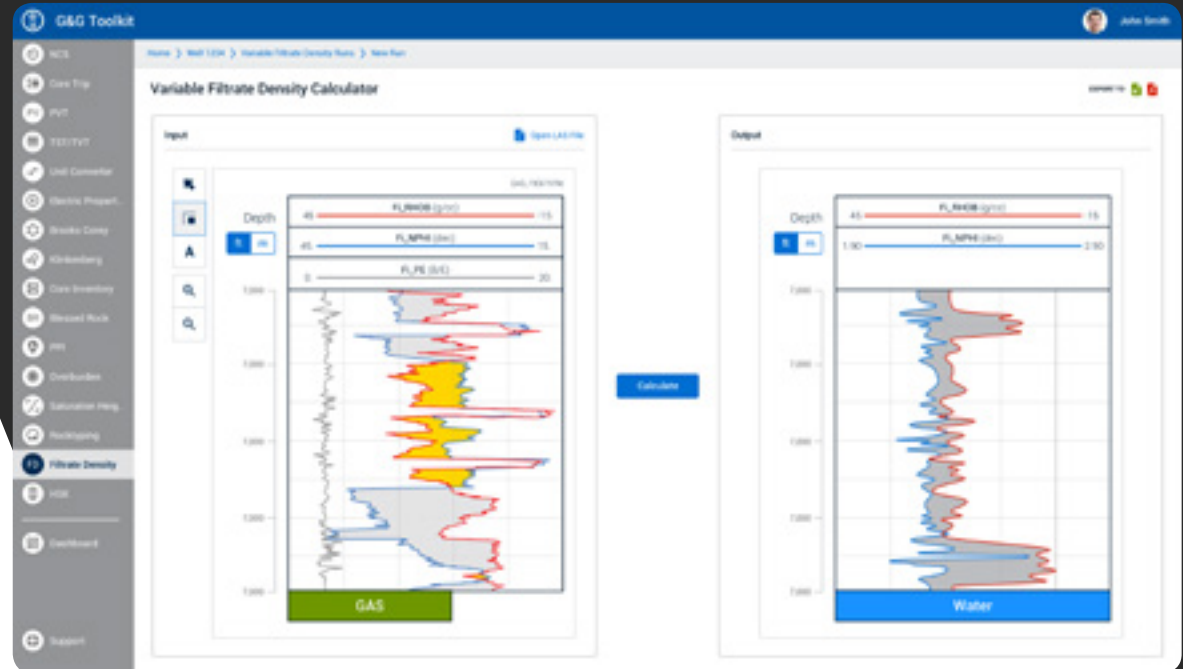
THE RESULTS

17
DESIGN
PROBLEMS
SOLVED

10
WEEK
TIMELINE

11
TAAS
MEMBERS

06
COUNTRIES
REPRESENTED





ADDITIONAL CASE STUDIES

TALENT AS A SERVICE GIVES YOU INSTANT
ACCESS TO DEDICATED RESOURCES WHO HAVE
WORKED ON PROJECTS SUCH AS...

MOBILE APP DEVELOPMENT - FOOD INTAKE TRACKER, SPACE

NASA ISS FOOD INTAKE TRACKER APP

Tracking the food astronauts eat while aboard the International Space Station (ISS) is essential for NASA to combat the health risks of long-term spaceflight. When the ISS first took flight astronauts were given an Excel spreadsheet to track food intake, but NASA quickly realized that they needed a better solution. Typing in zero gravity is difficult and time consuming, and many meals went unrecorded. In response, NASA wanted to design and build a fast, accurate, and simple iPad application to drive adoption with the brave men and women on the ISS.

With Topcoder, NASA went from application idea to a production-ready, astronaut-approved iPad app in just eight months. Topcoder broke the project down into small units of work spanning everything from UX design to testing the final application code, attracting hyper-specialized members from the Topcoder Community to solve the challenges that come with building an app for use in space. Not only did the application need to support facial recognition and voice command in the always-noisy, low-lit ISS, but it also had to recognize and record food and beverage packaging from countries with different barcodes than the United States (or with no bar codes at all).

After passing with stars (pun intended) through multiple rounds of human testing here on earth, the ISS FIT (Food Intake Tracker) app developed by Topcoder was loaded onto a rocket in late 2016. The ISS FIT app now passes over our heads 15.54 times per day, ensuring that every morsel consumed by astronauts is recorded for analysis.

In 2017, the app won NASA's coveted SC Director's Innovation Group Achievement Award.

Name of Contracting Organization:
US Department of Energy, National
Renewable Energy Lab

Prime/Sub:
Prime Contractor

Contract Number, Period of
Performance, Total Contract Value:
Contract Number: NNJ15HK30B,
06/04/2015-06/03/2020, NOIS-TO-23,
11/01/2016-03/01/2017, \$28,330



KEY ACCOMPLISHMENTS

MISSION ACCOMPLISHMENT

Crowdsourced design concept, development, and QA for NASA ISS FIT App

SERVICE/PRODUCT QUALITY

Repeat customer with 505 submissions from the community in the first challenge

DAY TO DAY MANAGEMENT

Managed through Topcoder direct and project leaderboard.

STAFF RECRUITMENT AND RETENTION

Implemented a minisite and newsletter mention to leverage the NASA brand as a recruitment aid

TIMELINESS

Challenge completion was 10 weeks

COST CONTROL

Project was completed on budget



24-HOUR STRUCTURED REGRESSION TESTING FOR AN ICONIC TECHNOLOGY BRAND

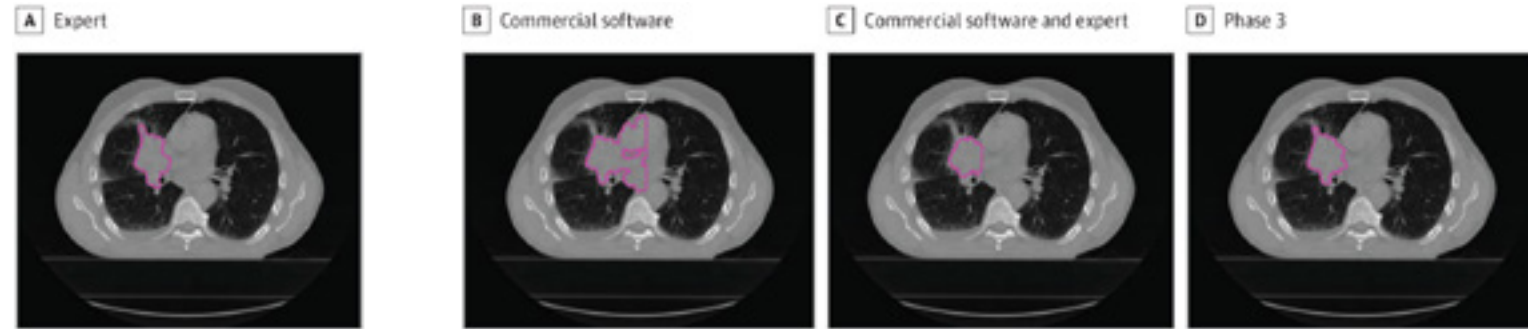
Microsoft asked Topcoder to help manually test two applications simultaneously. First was a stand-alone scheduling app that is to be retired by the end of 2019. The second was Microsoft Teams, which will replace the legacy scheduling app. Topcoder was asked to continue testing the legacy app as Teams was being built upon the existing architecture. Further, Topcoder conducted manual regression testing and exploratory testing as the client desired feedback from end users with a technical background, to identify functionality bugs & app usability.

Topcoder delivered the ability to execute 24-hour testing cycles every single week, increasing Microsoft's testing velocity and matching their product team's dev release cadence. Via on-demand testing on Topcoder, ramp-up & ramp-down was made simple and a world-wide community of testers continuously provided feedback and documented defects, while helping Microsoft achieve wider test coverage across more devices and operating systems.

THE OUTCOMES

24	500	93.5%
HOURLY TEST CYCLES	MANUAL TEST CASES/ MONTH	FULFILLMENT RATE





COMPUTER VISION - RADIOLOGY

HARVARD TUMOR HUNT

TOPCODER COMMUNITY DEVELOPED AI TO TREAT LUNG TUMOR PATIENTS.

The second leading cause of death in the United States is cancer. Among those cancers, lung cancer claims over 150,000 people's lives every single year. Topcoder joined forces with Harvard to tackle one of the most ambitious healthcare initiatives ever undertaken in the crowdsourcing world—creating and testing automatic delineation algorithms to help improve treatments of cancerous tumors in patients' lungs.

Manual tumor delineation—the measure of treatment field borders of tumors—is a time-consuming and complicated process. Among other pain points, it introduces individual bias as well as person-to-person inconsistencies. The Topcoder Harvard Tumor Hunt aimed to produce an automatic tumor delineation algorithm that met the accuracy of the average radiology expert but exceeded them in both processing speed and consistency. Three project phases produced an algorithm that provides real, substantial tumor delineation results without individual bias and expert-to-expert inconsistencies.

The first stage of this marathon challenge involved producing an automatic delineation algorithm that was as accurate as experts in the field.

During this stage, 31 competitors from various countries (e.g., United States, Bulgaria, Poland, Brazil, etc.) participated in creating a real, actionable algorithmic solution that can be applied on a grand scale. In the second stage, 11 competitors worked to target the credibility of that algorithm by pairing it with expert feedback to train the algorithm to avoid mistakes that experts wouldn't make. A final, private phase tasked five privately selected Topcoder members to incorporate final feedback from physicians and experts.

In the end, the Harvard Tumor Hunt brought 31 of Topcoder's best and brightest data scientists together to create an actionable solution that was successful at both rapidly and automatically delineating cancerous tumors with the same level of skill as experts. By accurately detecting the size and scope of cancerous tumors, radiologists can maximize the impact of treatment on cancerous cells and minimize its impact on non-cancerous tissues—as well as accurately determining the correct treatments options for in-need patients—potentially saving lives and breeding superior practices into cancer treatment and identification.



IF YOU'RE READY,
WE'RE READY!

I'm Kiran, your point person for all things Talent as a Service at Topcoder. Questions? Ideas? Projects? Reach out and let's get started.



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