**Christopher Guo, Ph.D.**

Consumer behavior and data science at Treyarch (an Activision/Microsoft company)

Ex-behavioral and environmental economics policy wonk

E: [chrislguo@gmail.com](mailto:chrislguo@gmail.com) T: 805.617.0844

EMPLOYMENT

**Activision Blizzard**

*Sr. Director, Game Economist Apr 2017 – March 2025*

Transitioned from centralized consulting to building the data function at Treyarch, a development studio owned by Activision. Led cross-functional Product Oriented Delivery teams across product management, design, engineering, and data science. Reported to Treyarch Co-Studio Head.

* Shipped #1 bestselling U.S. game of 2020 and #2 bestselling U.S. game of 2018 – guided strategic decisions for gameplay balance, customer engagement, social matchmaking, and monetization of virtual goods in the digital marketplace (game economy).
* Radically improved game economy revenue from $255M (2018) to $1.2B (2021) through a combination of structural features and local optimizations – examples below.
* Drove a strategic transition from a controversial “loot box” business model to new player-friendly, deterministic monetization systems (e.g. battle pass and item store).
* Spearheaded integration of our premium game with a free-to-play game in the Call of Duty metaverse, resulting in SAAS-like recurring revenue dynamics and a sharp 30% Y/Y increase in unit sell-throughs.
* Introduced personalized algorithm features such as store recommender (MyDeals), automated merchandise scheduling, dynamic pricing, contextual purchase, and gifting. Learnings led to creation of family of products which now contribute 45% of revenue.
* Launched 12 “Seasons” of DLC content, blending in-game engagement events, top tier marketing, and purchasable content—all wrapped in the narrative of our games.

*Sr. Director, Central Technology - Experimentation Jul 2016 – Oct 2018*

Recruited to lead an internal data science product group. Pioneered in-game A/B testing (>1M players) by developing infrastructure and analysis tools; supervised the design and ideation for the first experiments at the company. Reported to the CTO.

* Shifted team goals (10 data scientists, engineers, and analysts) from research to business metric growth.
* Testing of monetization features, including store UI, price, and promotion strategy, delivered a 150% increase in franchise ARPU Y/Y.

**Pandora Media**

*Advisor Apr 2016 – Jul 2016*

In 2016, Pandora acquired Ticketfly. I was brought in post-acquisition to integrate Ticketfly with Pandora's concert recommendation platform. Managed communication of estimated concert ticket sale potential with C-levels and key stakeholders.

**RAND Corporation**

*Associate Economist; Professor, Entrepreneurship Public Policy Sep 2012 – Jun 2016*

Staffed and managed multidisciplinary policy teams undertaking consulting projects for U.S. government agencies and international organizations. Extensive client interaction, including roadmaps, interim briefings, and report publication.

* Raised $1.2M in internal and external research contracts; responsible for recruitment, budget allocation.
* Led a team of six scientists and engineers charged with identifying new market opportunities and privacy risks from electric grid big data for the 2015 Dept. of Energy Quadrennial Review.
* Applied survival analysis and ML regression models to forecast retention of high-value personnel within the Dept. of Defense for the Senate Armed Services Committee.

**Bren School for Environmental Science and Management - University of California, Santa Barbara**

*Research Fellow, Behavioral and Computational Economics Sep 2006 – Jun 2012*

* Raised $200K in research grants and awarded two separate National Science Foundation fellowships.
* Built agent-based simulations of adaptation to climate change; designed human subject experiments investigating perceptions of fairness; published in top behavioral econ and environmental econ journals.

**Private SAT Tutor and College Counselor, San Diego, CA**

*Co-founder and Owner Oct 2004 – Aug 2006*

Solicited new clients, developed teaching materials, experimented with pricing plans and market segmentation. Expanded business through representing additional tutors.

**Bank of America Merrill Lynch**

Investment Banking Analyst Jun 2003 – Sep 2004

EDUCATION

**University of California Santa Barbara**, Ph.D. Economics, 2006 - 2012

* Dissertation on Bayesian statistics, decision science, and risk management in natural resource markets.
* Excellent teaching performance evaluations for Principles of Economics-Micro, Macro.
* Club Triathlon Team.

**Harvard University**, B.A. with Honors in Economic, 1999 - 2003

* Coursework in Computer Science 50 & 51. MBA Financial Accounting (MIT Sloan School of Management).
* Perfect Scores on SATs.

ADDITIONAL INFO

Technical Skills: Data Visualization, Casual Inference and Econometrics, Regressions, Machine Learning, Simulation and Modeling Risk, Dynamic Optimization, Game Theoretic Modeling.

Computer Skills: R, MATLAB, Python, SQL, C++, Java, C, Lisp.

Interests and Hobbies: surfing and surfboard construction, graphic design