# ROBERT BEATTY

PRODUCT MANAGER



## **EDUCATION**



MS/ELECTRICAL ENGINEERING [3.8/4.0] Stanford University 2008–2009



BS/ELECTRICAL ENGINEERING Stanford University 2005–2007



UNDERGRADUATE STUDY [3.9/4.0] Brigham Young University 2004–2005

## SKILLS

Product Management
Product Lifecycle Management
Artificial Intelligence
Machine Learning
Cloud Computing
Amazon Web Services (AWS)
Google Cloud Platform (GCP)
Mobile Application
iOS Development
Android Development
Agile Methodology
Scrum Master Certified
Linux Servers

### SOFTWARE

C/C++, C#, Objective-C, Python, Matlab, HTML, CSS, Java, Javascript, SQL, NoSQL, SQLite Unity 3D, Jupyter Notebooks, Visual Studio, Xcode, Android Studio, Adobe Creative Suite

## PROFILE SUMMARY

Seeking **Product Management** position to develop next-generation products and novel technologies—with special interests in **Artificial Intelligence / Machine Learning (AI/ML), Cloud Computing**, and **Mobile Application Development**.

## EXPERIENCE

#### SENIOR PRODUCT MANAGER, Google (2019 - 2023)

- Product Manager for Accelerator-Optimized machine types which provide
   GPUs for artificial intelligence, machine learning, and graphics in the cloud
- Designed next-generation NVIDIA GPU products for Google Cloud Compute Engine (GCE)
- Drove \$XXXM/yr business with 100s companies and millions of users globally across ML Inference and Graphics product lines
- Defined product strategy and infrastructure for AI/ML for Google Cloud
- Product Manager for Compute-Optimized machine types for high-performance compute-intensive workloads in the Cloud for workloads such as high-speed web servers, ad serving, game servers, high-performance computing (HPC), analytics, scientific modeling, media transcoding, and AI/ML
- Launched AMD Milan EPYC CPUs in Google Compute Engine (GCE) which includes N2D and C2D machine types

#### SENIOR PRODUCT MANAGER, Amazon (2018 - 2019)

- Designed and launched G4dn instance within Amazon Web Services (AWS) which features NVIDIA T4 GPUs used for Artificial Intelligence / Machine Learning (AI/ML) inferencing and deep learning and graphical applications such as game streaming, media transcoding, video-on-demand, broadcasting, remote desktop, and Virtual Desktop Infrastructure (VDI)
- AWS' G4dn set the industry standard for cloud inference for over four years and opened new services and business opportunities with leading price/perf
- Developed product strategy across full accelerator product line such as G2, G3, G4, and F1 (FPGA) instances

#### PRODUCT MANAGER, Intel (2016 - 2018)

- Developed Product Requirements for Autonomous Driving software across multiple software subsystems that included Android, Linux, and MobileEye
- Designed requirement management infrastructure using JAMA and JIRA that
  maximizes re-usability and efficiency which drives dozens of simultaneous
  software programs and multiple, concurrent products
- Coordinated and lead hundreds of engineers across software development and validation workflow from product definitions to product delivery

## **PATENTS**

#### LASER CONTROL SYSTEM

Beatty, Robert M. "Improved Feedback Control for High-speed Mach-zehnder." filing number 14/567,571, filed 17 December 2014 and issued 20 June 2017.

## **PUBLICATIONS**

A 4×12.5 Gbps CWDM Si

Photonics Link using Integrated
Hybrid Silicon Lasers, CLEO:
Science and Innovations (CLEO:
S and I), Silicon Optical Links
(CThP), May 1, (2011).

<u>Demonstration of a High Speed</u>
<u>4-Channel Integrated Silicon</u>
<u>Photonics WDM Link with Hybrid</u>
<u>Silicon Lasers</u>, Integrated
Photonics Research, Silicon and
Nanophotonics (IPRSN), July 25,
(2010).

Integrating Silicon Photonics, Nature Photonics Vol 4, 498-499 August 2010. [Cover Feature]

## HONORS

Apple iPhone New and Notable in App Store (2010) Intel Developer Forum (2010) **Intel Rotations Engineers** Program (2009) Stanford Research Experience for Undergraduates (2006) Stanford LDSSA Committee Member (2006) Full Academic Scholarship at Brigham Young University (2005) LDS Missionary in the Czech Republic (2004) International Baccalaureate Recipient (2001) National Honor Society (2001) Eagle Scout Award (2000)

## LANGUAGES

English (Native) Czech (Intermediate)

#### PRODUCT MANAGER, Intel (2014 - 2016)

- Product Manager across multiple projects for Android, Android Things, RTOS,
   and Internet of Things within Open Source Technology Center
- Successfully launched multiple Android tablet and phone products through Intel Reference Design for Android (IRDA)
- Defined software product roadmaps, requirements, and product definition and drove software product lifecycle from planning through engineering execution

#### ANDROID SOFTWARE DEVELOPER, Intel (2013 - 2014)

- Wrote embedded software Audio drivers for Android x86 mobile phones and tablets and contributed to Android Open Source Project
- Built Jenkins+Gerrit Continuous Integration / Delivery (CI/CD) Infrastructure
- Agile Scrum Master using Atlassian Jira

## ELECTRO-OPTICAL ENGINEER, Intel Labs (2009 - 2013)

- Developed Silicon Photonics technology for high-speed optical interconnects
- Demonstrated 50 Gbps silicon photonics optical transceiver and presented at Optical Society of America
- Wrote Optical Control System with SiLabs C8051 Microcontrollers for embedded integrated laser diode bias
- RF Probing, high-speed validation, and Test Automation in Matlab

#### **ENTREPRENEUR AND FOUNDER, Crit Games LLC (2017 - Present)**

- Created physical, web, and mobile games on iOS and Android
- Built and hosted website (critgames.com) and cloud applications
- Launched multiple successful crowd-sourced projects on Kickstarter

#### **RESTAURANT OWNER, Game House Cafe (2017 - 2018)**

- Founded Game House Cafe LLC, a board game cafe in downtown Beaverton,
   Oregon with 500+ board games and delicious food and beverage options
- Built website, lead social media, grew community groups, and hosted events
- Promoted local game developers and publishers through marketing campaigns

#### ENTREPRENEUR AND FOUNDER, Theory of Mind LLC (2010 - 2013)

- Developed children's educational iPhone Apps: Circus, AAC text-to-voice, Scratch, What's This?, Little Bot
- Developed novel communication techniques and methods for disabled and special needs individuals using mobile and tablet technology known as Augmented and Accelerated Communications
- Built and hosted website (theoryofmindmedia.com)

#### **DESIGN ENGINEER, Intel (2008)**

- Printed Circuit Board (PCB) Design for Intel Digital Home Group
- Owned board design for **x86 Internet TV set-top boxes** (Sodaville)

## **ELECTRICAL ENGINEERING INTERN, Sandia National Labs (2007)**

- Prototyped **Bayesian Security system** using webcams and transceivers
- Wrote computer vision OpenCV solution in C++ that processed live video feeds for movement, face recognition, and object tracking
- Wrote **front end** in C# to connect multiple cameras to a central server
- Designed and fabricated sensor boards with wireless connectivity