

My Journey Into Glass

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Keywords

Glass, Google, technology, body, engineering, society, implications

Abstract

This article published in the IEEE Consumer Electronics Magazine, Volume 5, No. 1 January 2016 is a series of excerpts from 10 differing Google Glass Explorers who were interviewed by Alexander Hayes through 2014. More information and the entire web accessible interview playlist is available at <https://goo.gl/PTCnhw>

Biography

Alexander Hayes is a Phd scholar at the University of Wollongong, Faculty of Engineering and Information Sciences ([EIS](#)), School of Information Systems & Technology ([SISAT](#)). He has had industry experience in information systems, data sciences and web development with industry, government, not-for-profit in the arts, education, justice and welfare sectors.

Hayes is a visiting Researcher at [Aalto University](#), [LeGroup](#), [Media Lab](#), Finland and Professional Associate with the College of Adjuncts at the [University of Canberra](#), [INSPIRE Centre](#). He researches the social implications of emergent technologies with a focus on ethics and data sovereignty. Associated research interests include social media, networked and mobile learning, unmanned aerial systems, policing, privacy, state-society relations and national security.

His research is contributing to how academics and practitioners alike think critically about innovations such as [Google Glass](#) and related wearable technologies. As a web developer at the University of Wollongong he supports the Transnational Communication Community of Practice ([TCCOP](#)) and lectures in Social Informatics and the Workplace (ISIT203).

I came into this industry as a wearable technology reseller and educator with a background in e-learning and flexible delivery.

My interests in location enabled, wearable video technologies began in 2003, culminating over the ensuing years in national and international projects with industry, policing, national security and social research including the impact on the Australian vocational education and training sector [1].

In early 2009 as a Director of my own company Streamfolio Pty. Ltd. I learned of a head worn device that Google was developing that brought various aspects of these technologies together. I also learned that Google were amongst other developers also developing in the same space including Samsung and Epson.

It became obvious to me as an Professional Associate at the University of Canberra that the Glass Explorer program was in roll out mode as early as mid 2012.

In connecting with the Google Glass Explorer program I received rebuttals from Google Representative Sarah Price [2] on the 9th October 2012 who indicated that Glass was not available for researchers nor as an Australian citizen.

I managed to connect with a US based developer Cecilia Abadie [3] in 2013 who introduced me to over 100 Glass Explorer's of whom 47 provided me with a direct, live, recorded and distributed interviews online [4]

In my research as a PhD candidate at the University of Wollongong there are three large data collection efforts - (1) interviews with key stakeholders prior to the launch of Google Glass; (2) interviews and supporting data collected in mid 2013 at the ISTAS13 [5] conference in Toronto, Canada and (3) a large collection of interviews in late 2013 through to mid 2014 with US based Google Glass Explorers.

The following ten (10) interviews are representative of different vertical applications of glass from a diverse array of stakeholders. I would encourage readers to visit the entire interview set as they are valuable in context and chronology.

Citations

Hayes, Alexander (2013): National Snapshot: Current Use of POV Technologies 2010 Australian Educational Context. figshare.

<http://dx.doi.org/10.6084/m9.figshare.106808>

Retrieved 23:04, Sep 14, 2015 (GMT)

Hayes, Alexander (2015): Sarah Price - Google Glass. figshare.

<http://dx.doi.org/10.6084/m9.figshare.1541936>

Retrieved 03:41, Sep 15, 2015 (GMT)

Hayes, Alexander, "The Sky Is the Limit [Interview]," in *Technology and Society Magazine, IEEE* , vol.33, no.2, pp.19-22, Summer 2014, doi: 10.1109/MTS.2014.2319936. Available at <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6824322&isnumber=6824300>

Hayes, Alexander. "Google Glass Interviews" Youtube. Available at <https://www.youtube.com/playlist?list=PLfhVHi9gqg5TLDTvvpVbl89NI5EJirTw8>



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|------------|---|
| Name | Professor Mark Billingham |
| Occupation | Academic, Entrepreneur |
| Role | Director, HitLabs, Auckland University |
| Type | Interview |
| Conducted | 17 March 2014 |
| Duration | 29:10 |
| Available | https://youtu.be/p538LILOKE8?list=PLfhVHi9gqg5TLDTvvpVbl89NI5EJirTw8 |

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| Begins | 3:55 |
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Excerpt

At the HitLab here we are not part of the official Explorer's program but I was very lucky to spend 5 months working inside Google last year as part of the Glass research team and so when I left Google they gave me some devices to take with me and so we are able to keep on doing research even though we are not part of the official program and so that means we can do research in a wide range of areas...so right now we are looking at how you can use Glass to support new types of collaborative applications or facilitate new types of capture of body sensing data, so even though we are not part of the program we are very much interested in developing research that will contribute out and we are also trying to contribute back to the Explorer (Google Glass) program in that, for example, most recently we have completed a course (development) on programming for Google Glass, providing a course and in the next week or so we will be providing slides and content back out to the web, the Glass Explorer program and to other venues as well.



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|------------|---|
| Name | Andrew Vanden Heuvel |
| Location | Michigan, USA |
| Occupation | Educator |
| Type | Interview |
| Conducted | 26 Feb 2014 |
| Duration | 30:44 |
| Available | https://youtu.be/7yx9Kz4Pqy4?list=PLfhVHI9gqg5TLDTvvpVbl89NI5EJirTw8 |
| Begins | 0:50 |

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| Excerpt |
| <p>You know my reluctance (to interview) was less because of overload although I have had several interview requests since receiving Google Glass and the Cern trip I did through Google, but it is also partly because I've come to to get a little bit of a cynical perspective on Google's genius marketing strategy behind Glass which is by giving Glass to all these Explorer's, we sort of have the burden of marketing their product, and what invariably happens is that when someone from CNN or from any news outlet to ask "...oh what about Glass in education" Google then pushes them back to me, and I've talked to other Glass Explorer's who report that just in walking down the street, you know if they are wearing it or they are using it, they feel like they have to stop and give tutorials, explain how it works and there is a burden that comes with that because I'm not being compensated in any way, in fact I've paid to get this thing, so they have kind of...it's like it is not like it is an accident, it is a very intentional way of marketing a product."</p> |



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| Name | Andy Lin |
| Location | Los Angeles, USA - Downie County |
| Occupation | Rehabilitation Technology Designer - Center for Applied Rehabilitation Technology (CART) |
| Type | Interview |
| Conducted | 04 June, 2014 |
| Duration | 43:06 |
| Available | https://youtu.be/LUOi9SG7L6E?list=PLfhVHi9ggq5TLDTvvpVbl89NI5EJirTw8 |
| Begins | 1:50 |

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| Excerpt |
| <p>It all started through my joining Google Plus and interacting with fellow Glass Explorers because I haven't actually met a Glass Explorer in person...unfortunately....but it is through all my interaction on Google Plus and just sharing my story about what I am doing with Google Glass and how it can potentially benefit people with disabilities.</p> |



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| Name | J.R. Curley |
| Location | Greater Los Angeles Area, USA |
| Occupation | Founder, Panagram - http://www.panagram.biz/ |
| Type | Interview |
| Conducted | 27 May, 2014 |
| Duration | 35:28 |
| Available | https://youtu.be/zljNYquCUoo?list=PLfhVHi9gqg5TLDTvvpVbl89NI5EJirTw8 |
| Begins | 6:42 |

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| Excerpt |
| I wear glasses everyday...I have to as my eyesight is quite poor...being able to go into an actual established place like I do once a year minimum to get an eye check and to see them being embedded in that feels very natural...I seeing it being a win-win for both Google and the ophthalmologists. |



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| Name | Cathie Reid |
| Occupation | Pharmacist, Entrepreneur |
| Location | Brisbane, Australia |
| Type | Interview |
| Conducted | 1 April, 2014 |
| Duration | 27:44 |
| Available | https://youtu.be/_ZSxwe6gFPk?list=PLfhVHi9gqg5TLDTvvpVbI89NI5EJirTw8 |
| Begins | 6:20 |

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| Excerpt |
| <p>I am not an American citizen. I actually went to a wearable tech conference in Los Angeles last year and was invited to participate in the Google Glass program as a consequence of that....you do have to accept the invitation on a computer on a US IP address and have it delivered to a US address and I was fortunate enough that I was going to Hawaii for Christmas just a couple of weeks later so I was able to a computer with a US IP address there and a delivery address, accepted the invitation and had it delivered to the hotel. You didn't have to sign any declaration saying you were a US citizen so...yeh.</p> |



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| Name | Mitch Jackson |
| Occupation | Trial Lawyer |
| Location | Southern California, USA |
| Type | Interview |
| Conducted | 1 April 2014 |
| Duration | 37:25 |
| Available | https://youtu.be/jOFBXkvUW7s?list=PLfhVHi9gqg5TLDTvvpVbI89NI5EJirTw8 |
| Begins | 6:45 |

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| Excerpt |
| <p>I've seen with whatever the technology is, with whatever the type of communication approach someone uses including trial lawyers use in court, that has changed over the years depending on which way society is going....I've just found that early adapters normally are the ones that a little thicker skin, they are not worried about the criticism, they are not worried about people saying things behind their back about what they are doing or how they are going about it and if you were to fast forward ten years from now I think what you will find is that everyone will be using mobile wearable technologies of one sort or another ...</p> |



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|------------|---|
| Name | Noble Ackerson |
| Occupation | Software Developer, Entrepreneur |
| Location | Washington DC, USA |
| Type | Interview |
| Conducted | 24 February 2014 |
| Duration | 28:29 |
| Available | https://youtu.be/bE-CVz_-XcE?list=PLfhVHi9ggg5TLDTvvpVbl89NI5EJirTw8 |
| Begins | 11:40 |

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| Excerpt |
| <p>That's life right? We live in a world that unfortunately has some bad actors and you just have to be situationally aware if you are in a bad part of town. Just as we do I wouldn't advise my friends and Family to go on a subway in the Washington DC area with a tablet in plain site, not because the Washington DC area is known for stealing tablets, it's just that you don't want to put yourself in a situation where you would have to be concerned when you are walking home. I think this is</p> |

the fear of Glass is the same fear of Glass that we had when iPhones first came out, Blackberries before that and Walkman's a long time before that and iPod's in between...



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|------------|---|
| Name | Libby Chang |
| Occupation | Lecturer, University of San Francisco |
| Location | San Francisco, USA |
| Type | Interview |
| Conducted | 9 March, 2014 |
| Duration | 27:45 |
| Available | https://youtu.be/0fi9H5HdLAM?list=PLfhVHi9gqg5TLDTvvpVbI89NI5EJirTw8 |
| Begins | 23:50 |

Excerpt

There are a lot of things that aren't allowed in China and the repercussions aren't always predictable so my guess is Glass is probably not going to be allowed in a lot of public areas like Tiananmen Square and other areas of protest. If they see it they will

probably ask you to remove it, but again, it's a little hard to predict.



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| Name | Virginia Poltrack |
| Occupation | Artist, Web Developer |
| Location | Johnstown, Pennsylvania USA |
| Type | Interview |
| Conducted | 10 April 2014 |
| Duration | 28:35 |
| Available | https://youtu.be/QzwYP41L804?list=PLfhVHi9gqg5TLDTvvpVbl89NI5EJirTw8 |
| Begins | 13:50 |

Excerpt

I would very much like to see that, and that's not me speaking because I am biased again because I have an affection for the product. I think we can have a conversation about genuine, helpful use cases that exist right now today that people can do and use

this product for and I think that when it is more widely available and people can see the benefits that this will happen, hopefully.



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|------------|---|
| Name | Jessica Henty Ridilla |
| Occupation | Post Doctoral Student |
| Location | Boston, Massachusetts USA |
| Type | Interview |
| Conducted | 8 April 2014 |
| Duration | 36:14 |
| Available | https://youtu.be/RkiP5WUpUdw?list=PLfhVHi9ggg5TLDTvvpVbl89NI5EJirTw8 |
| Begins | 22:40 |

Excerpt

As Glass is right now I can't see some way that it would so advantage people in the US that it would only be a US technology I feel like...I mean...so I think that the difference too is that I don't

really know what the privacy issues are but the thing that I use Glass most for is like for notifications that I have an email or sending text messages to my Husband without having to run over to my computer or pick up my phone, so that's kind of nice.
