

Kent Lyons, Ph.D.
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Inovo Studio

Founder *2022-Present*

- Stealth - broadly in the area of commercializing advanced research on wearables, IoT, sensing, artificial intelligence and user interfaces

Toyota Research Institute

Technical Lead and Staff Research Scientist

Machine Assisted Cognition Department *2019-2022*

- Co-created and co-lead the new MAC department as technical lead.
- Hired a team of nearly 20 research scientists and managers spanning AI & ML, Behavioral Science and HCI
- Set strategic vision for the department in conjunction with executives
- Guided team execution on use-inspired basic research
- Created and lead the department's IP generation processes

Staff Research Scientist *2019-2020*

- Responsible for implementation of the in cabin user experience for the Toyota LQ - a street legal concept car with L4 autonomous driving capabilities
- Directed more than a dozen contractors across several different organizations to instantiate the Yui agent
- Managed stakeholders across organizations: TRI executives, leadership at the Toyota Motor Corporation, Denso, and creative talent, and a startup providing key technology
- Brought the system up to state of the art NLP capabilities, and guided the different teams on it's usage
- Directed design and engineering resources for the vehicle's augmented reality head-up display. Contribute proof of concept code for sonifying the L4 autonomous capabilities of the vehicle

Tesla

Staff Software Engineer, Infotainment (User Interface) *2017-2019*

- Single-handedly replaced the entire speech and NLP system for all Tesla vehicles
 - Rearchitected the infotainment code base to drastically increase speech control abilities including defining a new API using protocol buffers
 - Upgraded the OS (buildroot), audio system and codebase (C++, Qt, gstreamer) which also involved fixing numerous audio codec issues more broadly
 - Wrote server side code to host our NLP system (Go) and connection to state of the art NLP cloud technology
 - Designed and implemented the NLP intents and entities for speech control of the vehicle

- Created a process and software to enable our internationalization team
- Responsible for infotainment telemetry stream
 - Lead GDPR compliance efforts on telemetry and worked with legal and PMs to set up processes to ensure continued compliance
 - Created first of their kind dashboards about key infotainment usage
 - Used telemetry to drive down cellular costs resulting in a **savings of millions of dollars per month.**

Technicolor AI Lab

Principal Scientist *2015-2017*

- Directly worked with the CTO of the Connected Home Division. Prototyped key IoT technologies and guided products and strategy for the business.
- With a shift in interest to mixed reality, I conducted novel research and advised the business groups on key XR tech.
- Developed and patented key technologies to help replenish the licensing pipeline

WatchPop, Inc.

Co-Founder *2015*

- Co-designed and built a smart watchface for the Pebble Smartwatch.
- After 3 months we reached a 1% install penetration on all Pebble Smartwatches.
- Responsible for architecture and development of the entire product stack including embedded, mobile, cloud backend and data analytics.

Yahoo Labs

Principal Research Scientist, Mobile Research Group *2013-2015*

- Lead mobile research “beyond phones”. Designed and ran key studies around wearable technologies. Implemented prototypes and advised the BU on these technologies and their product time horizons.

Nokia Research Center

Principal Researcher and Team Lead *2013*

- Guided team on IoT and wearable tech development in conjunction with our larger Advanced Engineering division
- Instrumental in CTO’s IoT working group looking for products beyond phones

Principal Researcher *2012-2013*

- Implemented, studied and patented novel wearable computing and IoT technologies
- Developed our cloud IoT backend (python)
- Key demos to Chair of the Board of Directors, CEO and larger executive team

Intel Labs

Research Scientist *2007-2012*

- **Worked directly with Intel’s CTO** to investigate a key technology at the request of the CEO
- Consulted with Intel Capital to provide diligence on novel technologies
- Developed, studied and patented key tech in the spaces of IoT, wearables, and novel sensors.

College of Computing, Georgia Tech

Research Scientist 2005-2007

Graduate Research Assistant 1999-2005

Undergraduate Research Assistant 1998-1999

Intel Research Berkeley Research Intern 2002

Charmed Technologies Associate Scientist 2001

Western Research Laboratory (Compaq/DEC) Research Intern 2000

Degree	Year	University	Field
Ph.D.	2005	Georgia Institute of Technology, Atlanta, GA., USA. “Improving Support of Conversations by Enhancing Mobile Computer Input” <i>Advisor: Thad Starner</i>	<i>Computer Science</i>
M.S.	2001	Georgia Institute of Technology, Atlanta, GA., USA.	<i>Computer Science</i>
B.S.	1999	Georgia Institute of Technology, Atlanta, GA., USA. <i>Highest Honors</i>	<i>Computer Science</i>

Other notable achievements include 24 issued patents. Over 50 top-tier peer reviewed publications in the fields of HCI, Wearables, UbiComp and AI/ML. Active in the academic research community and its leadership.