

Raphael Kim

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master degree interactive - industrial designer
master degree innovation immersive engineering
master degree numerical modelisation in virtual reality
diploma of Ecole Normale Supérieure in mechanical engineering

HUMAN COMPUTER INTERACTION PROTOTYPER

profile

Multidisciplinary prototyper with a background spanning mechanical engineering, interaction design, voice interfaces, hardware prototyping, AI systems and creative technology.

My work is driven by **curiosity** and by a tendency to explore technical subjects through hands-on experimentation. When a topic becomes interesting, I dive into it by building systems, testing ideas in practice, and refining them through iteration.

Across robotics, VR, interaction design, connected devices, voice interfaces and more recently self-hosted AI systems, the common thread has been exploring how complex technologies become tangible experiences and meaningful human interfaces.

AI / systems

Homelab AI infrastructure — Built and operate a self-hosted environment for local AI models, GPU nodes (Nvidia spark), networking, storage, virtualization and distributed monitoring, including an experimental observability brain and a voice orchestration prototype combining **lighting control with live storytelling**.

work experience

2019	Snips / Sonos Senior Voice Experience Technologist <ul style="list-style-type: none">• Prototyping around the Sonos voice experience• Specification of Sonos Voice Control user experience• Exploration of alternative interaction models around voice interfaces	Paris, FRANCE
2018	Snips Hacker in Residence <ul style="list-style-type: none">• Creation of innovative prototypes to explore new interactions and interfaces• Around 20 prototypes and several videos were made• Explored interaction models beyond voice-first approaches	Paris, FRANCE
2017	Dailymotion Design Systems Technologist <ul style="list-style-type: none">• Built the design system and tools such as interface translation in Sketch• Worked on interface population and DesignOps tooling• Explored new possible features, interactions, and devices	Paris, FRANCE
2015	Joshfire Lead Developer R&D / in charge of innovation <ul style="list-style-type: none">• Worked on IoT design, fabrication, and interactive installations• Built connected-device prototypes for Danone, PSG, Martell, Hennessy, Fenotek, Quo Vadis, Dome Pharma, and Pierre Fabre• Contributed to an SNCF VR experience that received multiple awards	Paris, FRANCE
2014	SAP Lab Innovation Prototyper <ul style="list-style-type: none">• Worked within the Chairman's project team on diverse innovative projects• Built a tool to share screens and applications in interactive meetings• This prototype later evolved into CoScreen, later acquired by Datadog	Palo Alto, USA
2013	Saatchi & Saatchi + Duke Creative Technologist <ul style="list-style-type: none">• Developed prototypes for Toyota, ClubMed, VISA Premier, Veuve Clicquot, and Piaget	Paris, FRANCE

2012	Publications	Austin/Laval
	<ul style="list-style-type: none"> • SIGCHI 2012 / LAVAL VIRTUAL 2012 • SPRayCE publications on Intel & Vice CreativeProjects / PFSK 	
2011	M.I.T Media Lab Fluid Interface Group Internship	Cambridge, USA
	<ul style="list-style-type: none"> • Creation of SPRayCE (Space Spray), a spray-based device allowing drawing in mid-air 	
2010	JRL-AIST Internship	Tsukuba, JAPAN
	<ul style="list-style-type: none"> • Non-smooth contact model for fast dynamic computation of poly-articulated bodies • Handled haptic devices for dynamic simulation • Final demonstrator of the European Commission project "ImmerSense" 	

education

2011	– STRATE COLLEGE DESIGNER	Sèvres, FRANCE
2013	(master degree) industrial / interaction design <ul style="list-style-type: none"> • interactive design • video production / realisation / post-production • desktop publishing (Illustrator, Photoshop, Indesign) • arduino project and development of interactive systems • packaging and retail design 	
2010	– ECOLE NATIONALE SUPÉRIEURE DES ARTS ET MÉTIERS	Laval, FRANCE
2011	(master degree) innovation and virtual reality engineering (master degree) numerical modelisation in virtual reality <ul style="list-style-type: none"> • virtual reality / augmented reality • devices for virtual reality and haptics • 3D modeling and animation • real-time 3D and video games • human computer interaction • conducting innovative projects management 	
2008	– ECOLE NORMALE SUPÉRIEURE	Cachan, FRANCE
2010	(master degree) mechanical engineer <ul style="list-style-type: none"> • modelisation of solid and fluid continua • CAD and PLM • vibrations and waves • numerical methods for PDEs • material sciences • discrete event systems • design and dimensioning for mechanical transmissions • command in manufacturing systems • numerical resolution methods • fluid dynamics • prototyping industrial products 	

extras

- technology enthusiast, maker
- Python, objective-c, nodejs, web-dev, mongodb, fusion360, 3DS max, PCB making, unity3D, Ollama
- DIY homelab: local AI models, GPU nodes storage, observability brain, voice orchestration experiments
- voice assistant prototype combining lighting control with live storytelling
- DIY electronics, IoT, robot arm, 3D print
- music composition and experimental instruments
- photography / computer generated art
- fluent French / speaking and writing English / native Korean