

Raphael Kim

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M.Sc. Interactive & Industrial Design
M.Sc. Immersive Engineering
M.Sc. Numerical Modelling (VR)
ENS Diploma Mechanical Engineering

AI Systems Engineer

profile

AI systems engineer building end-to-end AI systems: local inference, orchestration, voice pipelines and real-time interaction.

Background in interaction design and embedded systems. Experience at Snips / Sonos on production voice systems.

Currently developing self-hosted AI infrastructure (GPU nodes, local LLMs) and multimodal systems (voice, IoT, generative interaction).

AI systems engineering

- Built and operate a self-hosted AI infrastructure (GPU nodes, local LLMs, networking, storage, virtualization)
- Designed real-time voice AI pipeline (STT → LLM → TTS, streaming, low latency)
- Developed orchestration layer for multimodal interaction (voice, IoT, storytelling)
- Implemented observability stack (monitoring, logging, health checks, reporting)

work experience

2019	Snips / Sonos Senior Voice Experience Technologist <ul style="list-style-type: none">• Prototyped voice interaction systems and conversational pipelines (real-time, production constraints)• Worked on production-grade voice systems and interaction architecture• Contributed to Sonos Voice Control UX specification• Explored alternative interaction models for voice interfaces	Paris, FRANCE
2018	Snips Hacker in Residence <ul style="list-style-type: none">• Built 20 functional prototypes exploring interaction systems• Worked on voice and post-voice interaction paradigms	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">• Built IoT systems and connected device architectures• Developed hardware/software prototypes for major clients• Led innovation projects combining embedded systems and backend services	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