



## **Computer Vision Research Engineer (F/M/D)**

Company	Authentic Vision GmbH
Location	Wals, Salzburg, Austria
Reporting Relationship	VP, Research and Development
Website	<a href="http://www.authenticvision.com">www.authenticvision.com</a>



## **COMPANY BACKGROUND**

Authentic Vision (AV) offers a mobile authentication solution used by customers worldwide for brand protection and consumer engagement. Headquartered in Salzburg, Austria, Authentic Vision is a rapidly growing company with a global team and due to increasing customer engagement is expanding the commercial team in Europe.

The solution is based on security tags that provide any product with a unique fingerprint, which can only be produced once. The tags can be authenticated by consumers with use of a smartphone app. A business intelligence portal provides channel & consumer data intelligence based on the scans. Authentic Vision holds several patents and is cooperating closely with a global network of partners to fight counterfeiting.

AV has been successful in signing agreements with US based customers like HDMI (4k and Ultra label licensing program) and Commscope (Electronics); and international customers like Danfoss (industrial products), Elsewedy (Industrial wiring) and Vulli (Sophie La Girafe Toys) and several partners like Authentix and Eurostampa. The company is poised for significant growth and offers a flexible and rewarding environment which recognizes talent and commitment.

## **STAGE AND PRODUCT OF THE COMPANY**

Authentic Vision was founded in early 2013 and the initial years were spent on evolving the core idea into IP, product ideation and product development. In the middle of 2015, customers were adopting the technology. We have been in market for 5 years and like most start-ups, went very broad across many industry verticals to determine and understand product/market fit. To date, Authentic Vision has ~30 customers.

We offer a smartphone-based product authentication solution, which allows anyone to verify the authenticity of a product instantly and without special equipment or knowledge. In other use-cases, users may identify themselves or unlock digital values based on the proof that they possess a physical security label.

Our physical security label features a unique, irreproducible holographic fingerprint. It can be automatically verified with a smartphone application, which uses the camera only. With each verification thousands of users help to generate valuable data points, which are used to fight counterfeiting and fraud on a global scale. As we, our customer base and therefore

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### **Authentic Vision Inc**

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also the need for improved security are rapidly growing, we want to get another creative, talented, motivated team member on board. We are looking for a

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### **THE ROLE:**

The Computer Vision Research Engineer creates and improves algorithms and tools for the optical authentication of Authentic Vision's hologram-based security labels.

- You work on non-standard use-cases and problems, often requiring out-of-the-box thinking
- Your work has direct impact on the security and performance of our solution in the markets.
- You operate in challenging markets and our solution is under constant attack by counterfeiters and fraudsters.
- Friendly company climate, with flexible working times, food vouchers and team- and company events
- You work in a high growth company, supported by an international investor network ☐ International environment, staff and customers

### **RESPONSIBILITIES, ACTIVITIES AND TASKS:**

- Conceptualize and implement algorithms for production
- Improve and analyze existing solutions to boost performance / KPIs.
- Build and maintain internal tools to increase development efficiency, dataset management and analysis.
- Benchmark and test algorithms for their production-readiness / generalization
- Monitor and analyze the performance of algorithms in production and deduce potential weaknesses and areas of improvement.
- Use telemetry and real-world data to detect anomalies and potential fraud in the markets.
- Investigative analysis of incidents ("attacks") and development of preventive strategies

### **ESSENTIAL EXPERIENCE:**

- Expert-Knowledge in at least one Machine Learning Framework (e.g. Tensorflow/Keras)
- Expert-Knowledge in OpenCV or a similar Computer Vision Framework
- Extensive Knowledge about traditional and contemporary Machine Learning Concepts
- 3y+ practical experience in Industrial Computer Vision and having worked on products, which were deployed and used beyond an academic and pure-research context.
- Experience in finding reasons and propose solutions when e.g. benchmark results deviate from production-feedback and telemetry.
- Databases, "Big Data" and SQL (NoSQL is an advantage)

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### **PREFERRED EXPERIENCE:**

- Experience in Machine-Learning and hand-crafted algorithms
- Relevant academic background, publications
- You have worked in a setting where generalization to uncontrolled environments and userbehavior is a priority.
- Data Analysis, Data Engineering and Data Mining
- Data acquisition, management and grooming of data sets (for Training and Benchmarking)
- Machine-Learning Pipelines, product integration and ML-Operations / Monitoring in production
- Experience with security audits (internal and external)

### **ESSENTIAL SKILLS:**

- Fluent English, German is an advantage
- Proficient in Python and C++ or similar languages
- Translate non-technical use-case requirements and attack scenarios into technical concepts and acceptance criteria
- Able to structure and describe concepts technically and on a higher level (e.g. to customers)
- Able to measure and analyze algorithm-performance in a data-driven way, in particular how well it generalizes to unseen data / unforeseeable attacks
- Able to make data-driven decisions
- Able to prioritize ideas and implementation aspects against deadlines
- Ability to switch to a fraudster mind set; How will criminals likely try to exploit, trick and bypass the system. Identify potential attacks before they happen.
- Able to estimate performance, limitations and development-efforts of an approach without implementing it.

### **ADDITIONAL INFORMATION:**

- Regular presence in the Salzburg-Office is mandatory, e.g. 3 days / week. We prefer to be in the same room around a whiteboard during concept-, analysis- and decision phases of projects. Home-office is possible e.g. during implementation times.

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*In case you are interested, please submit your CV and cover letter including salary expectations and earliest starting date to:*

Authentic Vision  
Thomas Bergmüller  
Vice President, R&D  
Ludwig-Bieringer-Platz 1, 5071 Salzburg, Austria  
[thomas.bergmueller@authenticvision.com](mailto:thomas.bergmueller@authenticvision.com)

Due to legal reasons we are obliged to disclose the minimum salary according to the collective agreement for this position, which is € 2.518 gross per month. Our compensation package is based on market-oriented salaries and depending on your background and work-experience, your salary could be significantly above the stated minimum salary.

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