

The AtonRâ Artificial Intelligence & Robotics certificate is a long-only, monthly rebalanced, USD-based actively-managed certificate.

Thanks to increasing computing power and big data, artificial intelligence (AI) has been expanding at a fast pace, with notably major advances in the fields of natural language processing and computer vision.

The development of the Internet of Things and of standard operating systems for objects and devices could give another massive boost to AI applications over coming years. With this, smart cars, smart homes and smart factories could become reality sooner than expected.

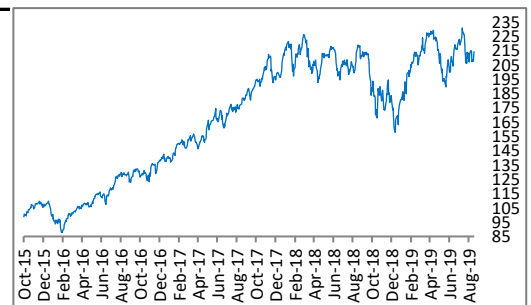
Specifically, collaborative robots could be a major field of application as software recreating the human thought process combines with mechatronic devices gradually becoming able to replicate the five human senses. Robot adoption should benefit from falling costs and from increasing labor costs in emerging markets that make them an attractive ROI proposition.

## Main Features

Asset Class	Equity
Inception Date	7-Oct-15
Currency	USD
Type of Return	Total Return
Ticker	NXSRARTI
ISIN	XS1035525325
Issuer	NATIXIS
Issue Price	100.0
Last Price	214.2
Sharpe Ratio	0.89
Correlation	0.7
Beta	1.40
Reference index	MSCI World Net Return

## MONTHLY RETURNS (%)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2019	17.0%	6.8%	3.6%	2.4%	-14.3%	11.7%	3.8%	-3.9%					26.4%
2018	11.8%	-1.3%	-4.2%	-6.0%	7.7%	-5.4%	-0.3%	9.7%	-2.4%	-15.4%	6.2%	-11.2%	-13.7%
2017	2.9%	5.0%	5.2%	-0.9%	7.2%	-1.6%	5.3%	5.5%	2.4%	5.1%	3.2%	-2.8%	42.5%
2016	-9.8%	0.5%	8.0%	2.0%	6.5%	-0.8%	11.6%	0.5%	3.6%	-2.2%	3.5%	3.1%	28.2%
2015									3.6%	5.2%	-1.3%		7.5%



### Highs/Lows

	Price	Date
All Time High	230.8	31-Jul-19
All Time Low	87.8	11-Feb-16

## August 2019 highlights

The AtonRâ Artificial Intelligence & Robotics certificate lost 3.9% in August, underperforming the MSCI World Net Return by 1.8%. Year-to-date, it outperforms its reference index by 11.3% and launch-to-date (October 7, 2015 launch), it outperforms by 74.7%.

**Ambarella** and its shifting image: a company becoming more (artificial) intelligent.

The Californian company has historically been associated with action cameras as it has been the primary chip provider of GoPro's cameras for years. These handheld devices offered the capability of filming HD quality video with incredible speed. Acquiring HD images (or videos) at high-speed rates required a chip that was able to handle a massive amount of data, from the place where it was generated, the image sensor, to the storage memory.

Images needed to be compressed and saved without quality losses, and all these tasks had to be completed by consuming the minimum possible amount of energy, a critical requirement of every portable device. The effort Ambarella put in solving these challenging tasks was remarkable, and the expertise developed ended up being an edge in human vision applications. In 2015 Ambarella bought **Vislab**, an Italian startup that pioneered computer vision technology for autonomous vehicle, and thanks to this acquisition, the company last year launched a portfolio of computer vision chips, the CV family.

The new chips are engineered to accomplish substantial tasks and run complex deep and convoluted neural networks (the artificial intelligence algorithms) at the edge, i.e. directly on the device that recorded the data. This feature is a massive advantage, especially when the requirements are pushed to the limits in terms of latency, power, and high performances, conditions met for instance in vehicle autonomy. Moreover, the CV chips family offers a complete solution, able to satisfy customers' needs from mainstream (CV25) to high-end applications (CV2). The main differences across the offer lie on the number of cameras that can connect to the chip, the rate of video processing and the computing power available for inferencing.

The advantage of this family of products over the competition on the market is twofold: on one side, they are built on a 10 nm node (**Samsung**), while EyeQ 4 from **Mobiledye (Intel)** is built on a 28 nm node, granting Ambarella higher performances. On the other side, the architecture of CV has been designed to be customizable and thus offer much more flexibility, if compared to EyeQ of MobilEye or Hi3516 family product of **HiSilicon (Huawei)**. This flexibility translates into the possibility for Ambarella to diversify its product offering across different computer vision segments.

Ambarella has leveraged its knowhow to move away from a saturated and non-strategic market (action cameras) into a broader new market (computer vision which includes ADAS, stereo vision, HDR, electronic mirrors for the automotive sector, etc.), which entails several high value-added applications. The company refocused on two new strategic markets, security and auto, which nowadays accounts for 80% of the revenue (60% for security camera and 20% for automobile, which represent an increase of +71% and +100%, respectively from FY-2017). This strategic shift to a new addressable market has started to deliver its first results: the company recently reported its third-quarter results, and the guidance beat the highest analyst estimate.

We remain convinced that Ambarella is well-positioned to capture the high growth that the automatization and image recognition will stimulate in the Automotive and Security industries, and therefore the company remains a significant holding in this certificate.

### Top 3 Contributors

**Name**  
 SUNNY OPTICAL TECH  
 AMBARELLA INC  
 ADVANCED MICRO DEVICES

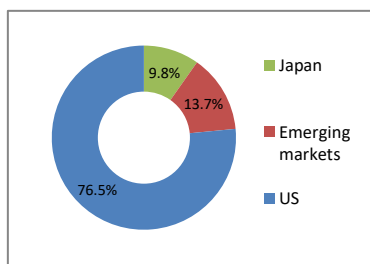
### Worst 3 Contributors

**Name**  
 CREE INC  
 NEW RELIC INC  
 SPLUNK INC

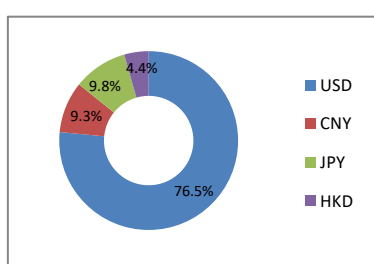
### Top 3 Holdings

**Name**  
 ADVANCED MICRO DEVICES  
 LATTICE SEMICONDUCTOR CORP  
 XILINX INC

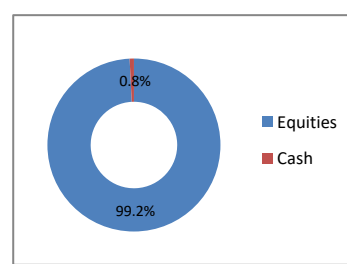
#### Geographical Breakdown



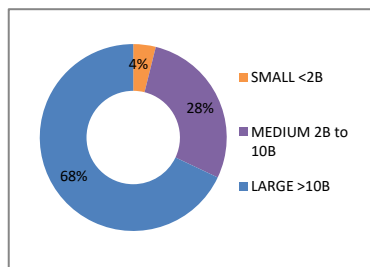
#### Currency exposure



#### Asset Allocation



#### Equity Market Capitalization



#### Equity Liquidity

1 to 3 days to liquidate*	100%
3 to 5 days to liquidate	0%
More than 5 days to liquidate	0%

\*on average daily trading over the last 3M

### Important Information

All net estimated returns are based on unaudited, internally prepared assessments and have not been independently verified. The net estimated returns are subject to adjustments as a result of changes or delays in AtonRâ's calculations of the profit and loss of the portfolio. Any such adjustments could have a material impact on the estimated net returns of the AtonRâ Basket. Net returns are reported after deduction of AtonRâ's management and/or performance fees.

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