Job Posting:164459 - Position: S25 Software Engineer (CloudVision Back-end) 164459 E2

Co-op Work Term Posted: 2025 - Summer

App Deadline 03/17/2025 11:59 PM

Application Method: Through Employer Website

Posting Goes Live: 12/17/2024 04:06 PM

Job Posting Status: Expired

ORGANIZATION INFORMATION

Organization Arista Networks

Address Line 1 9100 Glenlyon Parkway

CityBurnabyPostal Code / Zip CodeV5J 5J8Province / StateBCCountryCanada

JOB POSTING INFORMATION

Placement Term 2025 - Summer

**Job Title ** S25 Software Engineer (CloudVision Back-end) 164459 E2

Position TypeCo-op PositionJob LocationBurnaby, BCCountryCanadaDuration4 monthsWork ModeHybrid

Salary Currency CAD

Salary 78000.0 per year for 0 Major List

Salary Range \$ 6500

Job Description

Arista Networks is an exciting, fast-growing company creating the best software and hardware for running modern datacenter networks. Based in California with a Canadian office in Vancouver, it is run by Silicon Valley veterans and industry titans Andy Bechtolsheim, Ken Duda, and Jayshree Ullal.

Arista is developing a new class of integrated network solutions to address the scalability, performance, and reliability requirements of large-scale high performance computing and cloud datacenters. Arista plays a key role in the datacenters of companies ranging from Facebook to Microsoft, from AOL to Comcast, from ESPN to Netflix, from Citigroup to Morgan Stanley.

What's Cool at Arista?

Cloud *Software defined networks* *Network virtualization*

Empowered engineers. Our engineers are empowered with full responsibility for their projects. Our management structure is flat and lightweight -- you are in charge of delivering your work from design to code to test to customer shipment.

Insane amount of automation! We have run close to 20 million tests in our mini-data center that operates 24/7. We put a premium on building and using tools that make everyone super-productive. This translates into quicker turnaround times on new features and products for increased revenue with smaller teams.

We value openness. No part of the company is off-limits, meaning that our engineers have the chance to work on a variety of different areas. All our interns have the same responsibility as our full timers and get to work side-by-side on important, customer-impacting projects.

Software engineers at Arista deliver product features. The core responsibility is writing the code that drives our products. A software engineer is more than just a coding machine; they drive the whole development process including

- deciding the features to build
- driving the design
- writing and testing the code
- documenting the feature
- supporting customers in the field

Along the way, you might

- extend and improve the test infrastructure
- hack on our engineering tools

Example Projects

We don't have time for busy work: every project that we do has customers clamoring for it. Along with quick release cycles and an engineer-oriented culture means we always have a slew of interesting projects to tackle. What project you'll work on at Arista will vary a lot depending on our customer demands and your interests. Here are some sample potential projects:

1) Implement a stream processing blade

Our Aeris platform streams data from all switches in the customer network for real-time monitoring and historical analysis. Blades are stream processors written in Go that subscribe to some subset of data, transform it, and write the new data back into the system. We have blades that take counter streams and produce rate data, blades that calculate aggregates of various metrics (e.g. long term average, min, max), blades that trigger events based on real-time data, and we're adding more every day.

2) Improve stream processing infrastructure

Our stream processors are built over common infrastructure that handles functions such as event ordering, startup and restarts, subscriptions etc.

We are constantly improving that infrastructure to reduce memory usage, improve performance, and provide better accuracy.

3) Adding scale testing metrics

Our systems are designed to run in the cloud at any scale. One of the challenges is to validate that systems scale as intended. We work on tools to simulate the load our system will see in production and instrumenting the systems for performance analysis.

4) Aggregating metrics for network topology views

We are building network visualization tools that allow customers to manage their networks more efficiently. As part of this effort we preprocess low level metrics to form higher level metrics that are more useful for a customer. An example is summing up transfer (or error) rates over all connections between two switches or two groups of switches. This can give the customer a quick overview where otherwise they'd need to potentially look at hundreds of metrics.

Job Requirements

The Ideal Candidate

- loves to program and finds satisfaction in creating a well-written piece of code
- doesn't shy away from hard problems and enjoys the challenge of making reliable software
- wants to work side-by-side with the brightest minds in software, systems, and hardware
- learns how things work, just for fun or out of curiosity
- cares about the business too

You have (or want to have) experience with some set of

- Go
- C / C++
- Python
- Cloud technologies such as Kubernetes, Apache Kafka, HBase, gRPC
- Linux

Citizenship Requirement N/A

Position Start Date May 05, 2025 12:00 AM
Position End Date August 29, 2025 12:00 AM

APPLICATION INFORMATION

Application Procedure Through Employer Website

Cover Letter Required? No Special Application Instructions

Please submit your resume and transcript through the following Google Form: https://forms.gle/yqtPTLjy2xt3uYWw9

There is no application deadline. Applications are accepted on a rolling basis and the posting may expire at any time. Students are encouraged to submit their applications as soon as they are ready.

We'll be reaching out to successful applicants by email to schedule interviews!