

June 3, 2018

@Championship Value Prediction

ISCA 2018

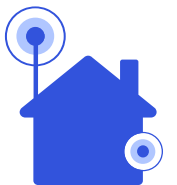
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CVP1 Results

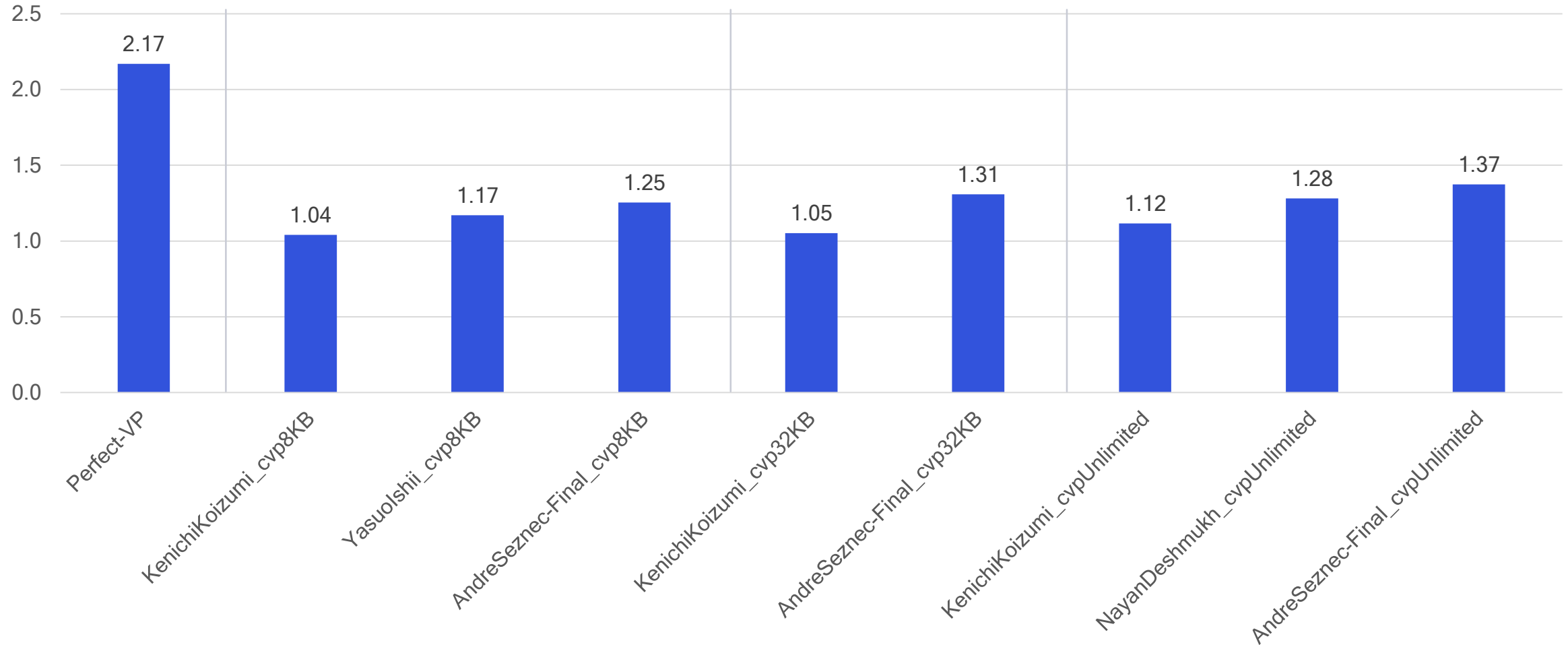
Arthur Perais & Rami Sheikh

Qualcomm Technologies, Inc.



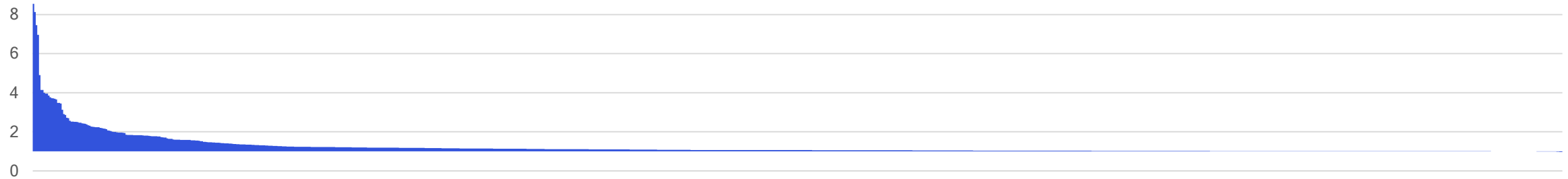
Public Traces

Geomean Speedup on Released Traces (Total of 135 Traces)



INT Traces (1002)

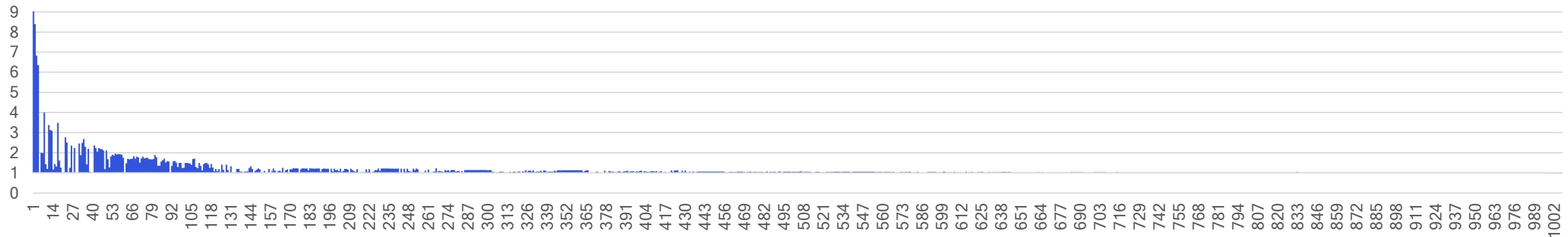
INT, Speedup S-curve (Best, Unlimited)



INT, Speedup S-curve (Best, 32KB)



INT, Speedup S-curve (Best, 8KB)



FP Traces (113)

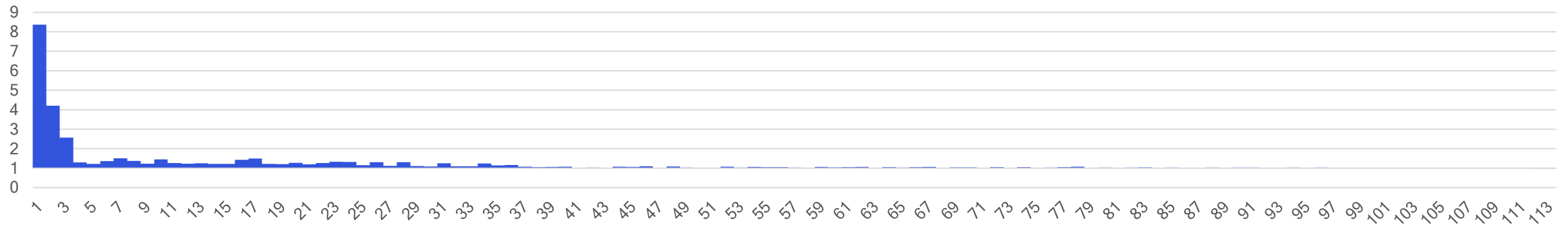
FP, Speedup S-curve (Best, Unlimited)



FP, Speedup S-curve (Best, 32KB)

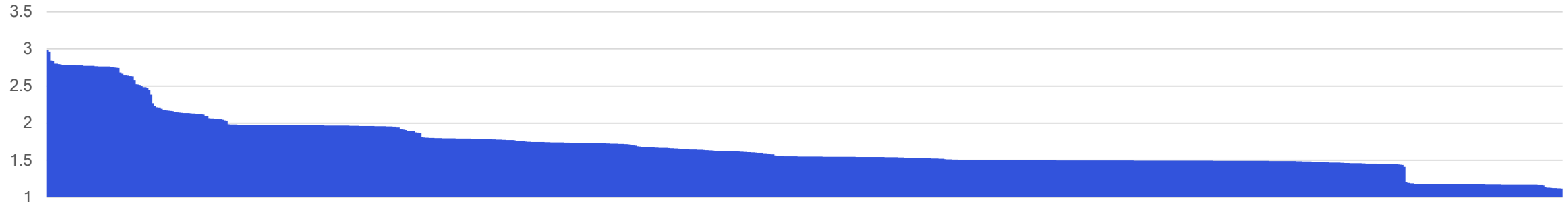


FP, Speedup S-curve (Best, 8KB)

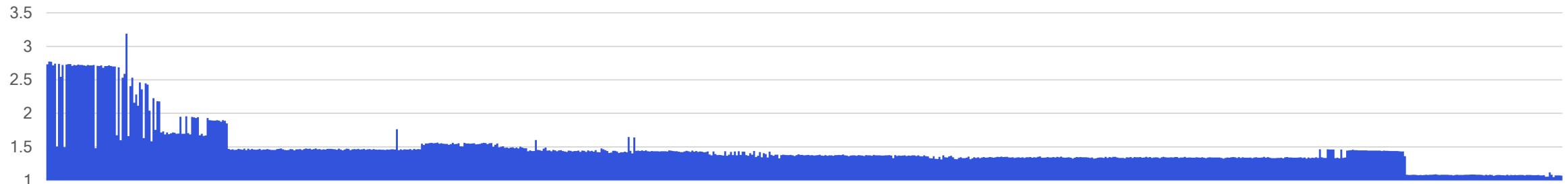


SRV Traces (785)

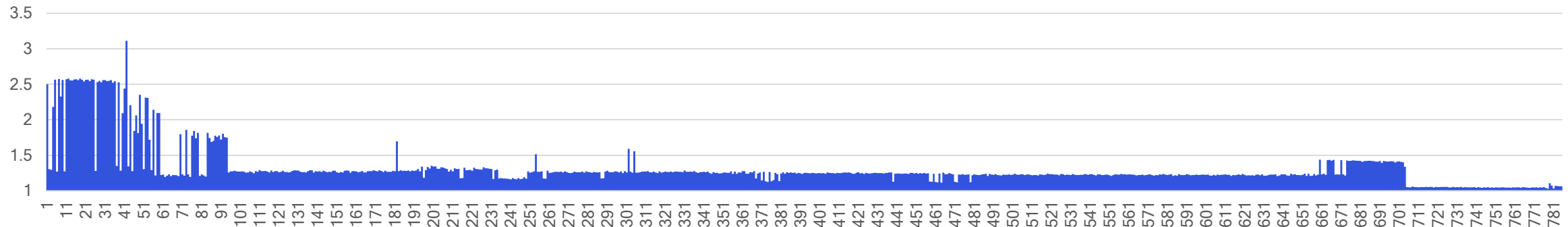
SRV, Speedup S-curve (Best, Unlimited)



SRV, Speedup S-curve (Best, 32KB)

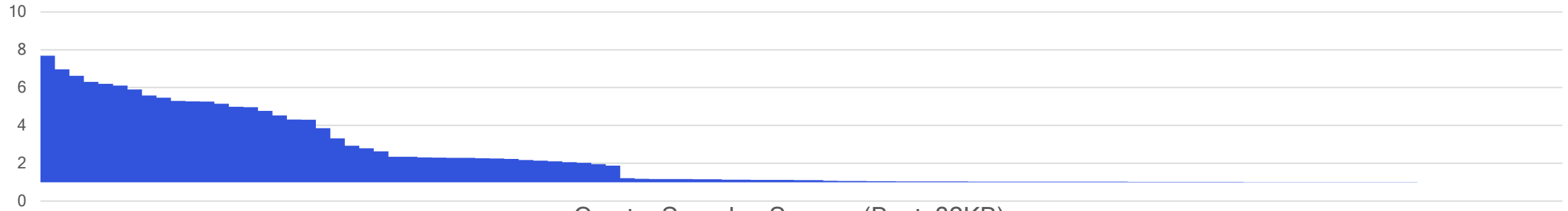


SRV, Speedup S-curve (Best, 8KB)

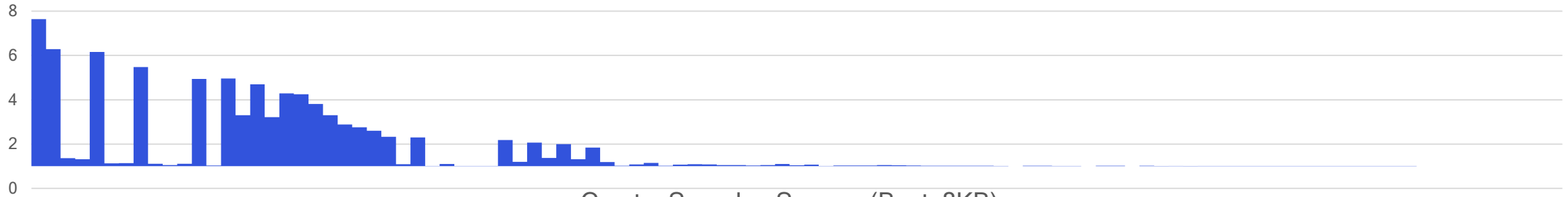


Crypto Traces (105)

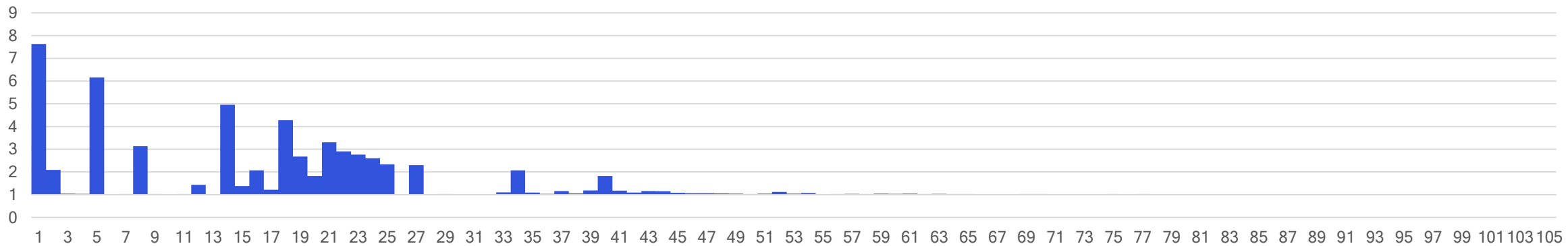
Crypto, Speedup S-curve (Best, Unlimited)



Crypto, Speedup S-curve (Best, 32KB)

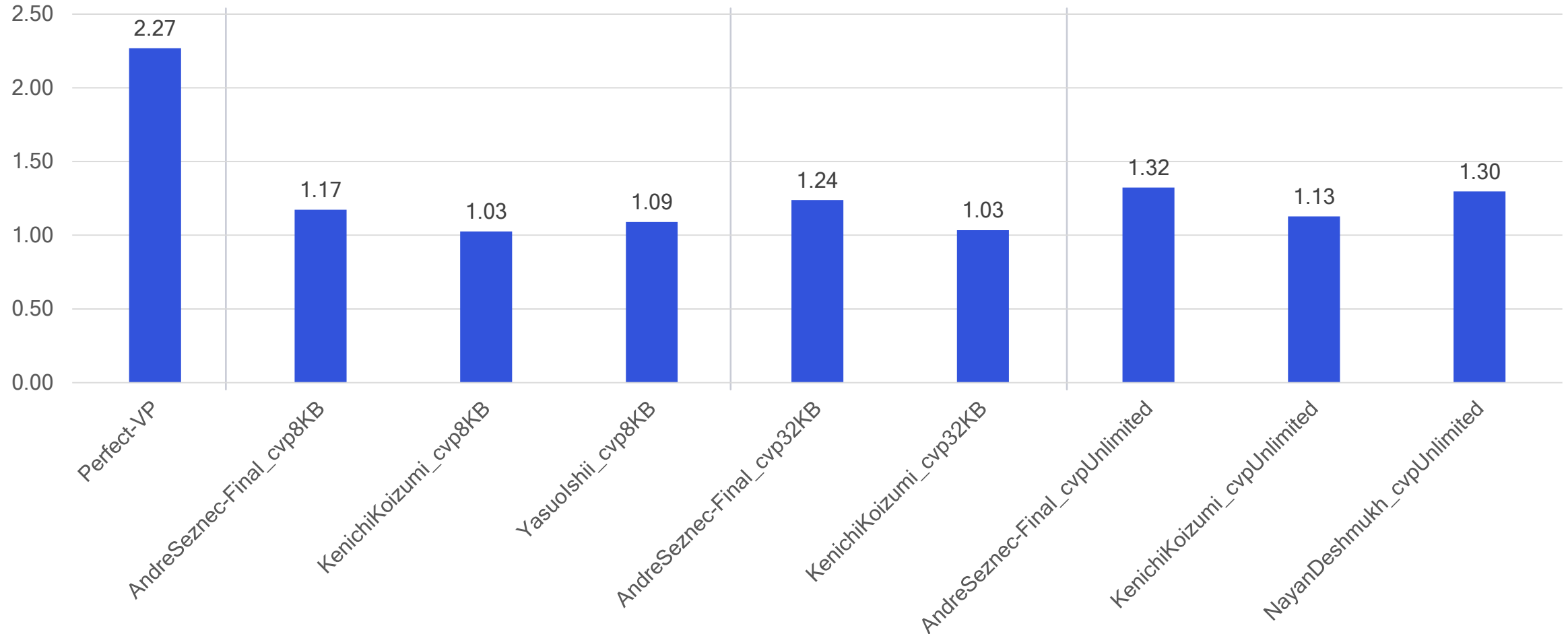


Crypto, Speedup S-curve (Best, 8KB)



Secret Traces

Geomean Speedup on Secret Traces (Total of 2013 Traces)



1st Championship Value Prediction Workshop (CVP-1)



8 KB, Unlimited Track - THIRD PLACE



32KB Track - SECOND PLACE

H3VP: History-based high-reliable hybrid value predictor

by

Kenichi Koizumi, Kei Hiraki and Mary Inaba

1st Championship Value Prediction Workshop (CVP-1)

8 KB - SECOND PLACE



Context-Base Computational Value Predictor with Value Compression

by

Yasuo Ishii

1st Championship Value Prediction Workshop (CVP-1)

Unlimited - SECOND PLACE



DFCM++: Augmenting DFCM with Early Updated and Data Dependency-driven VALUE ESTIMATION

by

Nayan Deshmukh, Snehil Verma, Prakhar Agrawal, Biswabandan Panda and Mainak Chaudhuri

1st Championship Value Prediction Workshop (CVP-1)

8KB, 32KB, Unlimited - FIRST PLACE



Exploring Value Prediction with the EVES predictor

by

André Seznec

With Many Thanks To :

- CVP PC Chair, Mikko Lipasti, and PC members
- CVP Steering Committee :
 - Alaa Alameldeen
 - Chris Wilkerson
- CVP Panelists : Profs. Sohi, Moshovos, Mendelson, Jiménez and Chris Wilkerson
- CVP Contestants
- My colleagues in CVP organizing committee:
Rami Sheikh, Eric Rotenberg, Vinesh Srinivasan
- Lizhong Chen, ISCA's workshop chair, and ISCA for having us





Thank you

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