

Benedikt Bünz

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Education

Stanford University

PhD in Computer Science, Advised by Dan Boneh

Interests: Applied Cryptography, Security with focus on Cryptocurrencies

Stanford, California

2016/9 – 2021

Stanford University

MS in Computer Science, GPA – 3.5

Specializations: Artificial Intelligence and Theoretical CS

Stanford, California

2014/9 – 2016/4

University of Zurich

BS in Computer Science, GPA – 5.5 (1-6 scale), Summa cum laude

Bachelor Thesis: Faster Algorithms and Better Payment Rules for Core-Selecting Combinatorial Auctions

Zurich, Switzerland

2011/9 – 2014/8

Work Experience

Research Positions

Visa Research

Intern, PhD Summer Intern

Confidential Smart Contracts

Palo Alto, California

6/17 to 9/17

University of Zurich

Research Internship, Computing BNEs in Combinatorial Auctions

Advised by Sven Seuken and Ben Lubin

Zurich, Switzerland

Summer '15

Stanford University

Research Assistant, Provisions

Dan Boneh

Stanford, California

Spring '15

Teaching Positions

Stanford University

Teaching Assistant, Cryptography (CS 255)

Taught by Dan Boneh

Stanford, California

Winter '16

Stanford University

Teaching Assistant, Bitcoin and Crypto Currencies (CS 251)

Taught by Dan Boneh and Joseph Bonneau

Stanford, California

Fall '15

University of Zurich

Teaching Assistant, Combinatorial Auctions

Taught by Sven Seuken

Zurich, Switzerland

Spring '14

Industry Positions

BandwidthX

Independent Contractor, Market Simulation

Simulated market mechanisms and bandwidth usage for offloading cellular traffic

Carlsbad, California

9/13 to 6/15

Exchange Traded Bitcoin

Intern, Arbitrage Trader

Developed automated arbitrage trader

Zurich, Switzerland

6/13 – 9/13

Awards and Scholarships

Studienstiftung des Deutschen Volkes

Auslandsstipendium, International studies scholarship

35,000 EUR grant from the German Academic Scholarship Foundation

Zühlke Technology Group AG

Graduate studies scholarship, zuehlke.com

9,000 CHF

University Zurich

Semester Price, uzh.com

Best 30 thesis per semester

Studienstiftung des Deutschen Volkes

German Academic Scholarship Foundation, studienstiftung.de

Awarded to top 0.5% of German students

Bonn, Germany

2014/8

Schlieren, Switzerland

2014/8

Zurich, Switzerland

2015/4

Bonn, Germany

2012

2016

Language Skills

German: Mother tongue

English: Fluent

Publications

Bünz, Benedikt, Jonathan Bootle, Dan Boneh, Andrew Poelstra, Pieter Wuille, and Greg Maxwell. Bulletproofs: Short proofs for confidential transactions and more. In *39th IEEE Symposium on Security and Privacy (SP)*, 2018.

Bünz, Benedikt, Joseph Bonneau, and Steven Goldfeder. Proofs-of-delay and randomness beacons in ethereum. In *IEEE SECURITY & PRIVACY ON THE BLOCKCHAIN (IEEE S&B)*, January 2017.

Gaby G Dagher, **Bünz, Benedikt**, Joseph Bonneau, Jeremy Clark, and Dan Boneh. Provisions: Privacy-preserving proofs of solvency for bitcoin exchanges. In *Proceedings of the 22nd ACM SIGSAC Conference on Computer and Communications Security*, pages 720–731. ACM, October 2015.

Vitor Bosshard, **Bünz, Benedikt**, Benjamin Lubin, and Sven Seuken. Computing bayes-nash equilibria in combinatorial auctions with continuous value and action spaces. In *IJCAI-17*.

Bünz, Benedikt, Sven Seuken, and Benjamin Lubin. A faster core constraint generation algorithm for combinatorial auctions. In *AAAI 2015*, February 2015.

Benjamin Lubin, **Bünz, Benedikt**, and Sven Seuken. New core-selecting payment rules with better fairness and incentive properties. In *AMMA 2015*, July 2015. Extended abstract of working paper.

Interests and Extracurricular Achievements

- Track Running (800m to 5000m): 5 medals in Swiss Relay and Team Championships, 4:08 mile pr
- Bike tour across the US www.crazyguyonabike.com/doc/18076
- Travel
 - Current Political Events