NICK YOUNG

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> EDUCATION

- Brown University – **ScB. in Mathematics and Computer Science** *[GPA: 3.93]*   *Class of 2023*
  > *Relevant coursework:* Software Engineering, Computer Systems, Deep Learning, Database Management Systems, Massive Time Series (Graduate), Probabilistic Methods in CS (Graduate), Logic for Systems, Graph Theory.

> EXPERIENCE

- Software Engineering Intern – **Bloomberg LP**   *June – August 2021*
  > Incoming Software Engineering Intern at Bloomberg LP.

- Software Engineering Intern – **Stochastic AI**   *June – August 2020*
  > Designed and built a webapp to deliver hardware-accelerated LDA for scRNA sequencing in **React** and **Python**.
  > Managed the web team and set up **CI/CD** for the website, webapp, and backend with **Github Actions, GCP,** and **Netlify**.
  > Engineered the backend microservices architecture from scratch using **GraphQL, Docker, Rust, Python,** and **Javascript**.

- Full Stack Engineering Intern – **Stylindex**   *June – August 2020*
  > Developed an automated **GraphQL** emailing microservice using **Rust**, deprecating an old, manual email scheduler.
  > Revamped the internal analytics system by building new charts in **React** and tracking API activity with **Rust** and **Python**.

> TEACHING

- Head Teaching Assistant – **Database Management Systems** *[CSCI 1270]*   *March – December 2021*
  > Revamped course to operate in GoLang. Wrote assignments, autograders, and implementations on SQL queries, query processing, query optimization, B+Tree indices, concurrent transactions, and logging and recovery.

- Teaching Assistant – **Discrete Structures and Probability** *[CSCI 0220]*   *June – August 2021*

- Teaching Assistant – **Software Engineering** *[CSCI 0320]*   *January – May 2021*
  > Wrote new Docker, SQL, and accessibility assignments. Integrated 8 new ethics assignments. Course had 211 students.

- Teaching Assistant – **Accelerated Intro to CS** *[CSCI 0190]*   *September – December 2020*
  > Coordinated lectures and labs on Discord. Wrote 11 new ethics assignments. Course had 114 students. Taught in Pyret.

> PROJECTS

- **TSDB** *[n-young/rust-db]*   *April 2020*
  > Highly performant time-series database built in **Rust**. Supports high-cardinality reads and writes of time-series data.
  > Leverages boolean logic-based query optimization and lightweight indexing to remain time- and space-efficient.

- **OxySAT** *[n-young/oxysat]*   *March 2020*
  > DPLL-powered SAT solver with heuristics to optimize search, built in **Rust**. Automated testing oracle built in **Python**.

- **DeepKart64** *[n-young/deepkart64]*   *December 2020*
  > A convolutional-reinforcement learning model that plays Mario Kart 64, built using **Tensorflow** and **OpenAI Gym**.

- **Droppy** *[n-young/droppy]*   *July 2020*
  > Secure Pastebin-style file sharing service in **React** and **Rust**, deployed on **GCP**, **AWS**, and **Netlify**.

- **LinguaML** *[n-young/linguaml]*   *January 2020*
  > Awarded: **Hack@Brown Facebook Prize** - Best Hack that Builds Community
  > Crafted a language learning mobile app using **React Native, Google Vision API**, and **Microsoft Translator API**.

> SKILLS

- Programming Languages – **Rust, Javascript, Java, Python, Go, Pyret, Racket,** MATLAB, Octave, HTML, CSS.
- Technologies – **Git, Docker, GCP, AWS, React, React Native, GraphQL, MongoDB, Hugo,** SQL, Node.js, Express, Rocket.
- Design – **LaTeX, Photoshop, InDesign, Illustrator, Lightroom, Premiere,** After Effects, SolidWorks.
- Interests – Photography [portrait, travel, event], Videography, Blogging, Public Speaking, Japanese, Badminton.