# PUNN KAM

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## Education

**University of California, San Diego**                                    **Expected Graduation: Jun. 2023**
*BS in Computer Science*                                                                            *La Jolla, CA*

- **Major GPA**: 3.9/4.0 **Overall GPA**: 3.8/4.0
- **Relevant Coursework**: Advanced Data Structures, Software Engineering, Discrete Mathematics, Operating Systems, Component Design, Computer Organization & Systems Programming, Calculus for Engineering, Linear Algebra
- **Clubs**: Blockchain at San Diego (Founder and Engineering Lead), ACM, Triton Rubik's Cube, Triton Poker

## Experience

**Euler Labs**                                                                          **Sep. 2022 – Present**
*Solidity Engineer*                                                                                    *Remote*

- Designing Automated Market Maker (AMM) to provide a manipulation-resistant price oracle for $150M+ of deposits.
- Simulating performance of AMM curve against current incumbents using over 100M trading events for various tokens.
- Devised new Solidity smart contracts to time-lock liquidity tokens and distribute token rewards for liquidity providers.

**Google**                                                                       **Jun. 2022 – Sept. 2022**
*Software Engineering Intern*                                                                   *Mountain View, CA*

- Integrated Ads Onebox for keyword queries of 4M+ unique advertising customers with projected 11% revenue increase.
- Implemented a low-latency cache lookup to meet 200 ms latency requirement using bloom filters in server middleware.
- Updated keyword data cache for 10B+ Ads keywords using a borgcron job and a load-balancer to smooth out Rpc calls.

**Scripps Institute of Oceanography**                                              **Nov. 2021 – Jun. 2021**
*Software Engineering Intern*                                                                        *San Diego, CA*

- Implemented communications network for semi-autonomous oceanic research device maintaining 99.9% uptime at sea.
- Coordinated thread-scheduling for 7 active sensors which asynchronously monitor ocean conditions and capture images.
- Decreased SSD storage utilization by 60% by developing a quality-control filtering pipeline during image capture stage.

**Siam Commercial Bank**                                                          **Aug. 2020 – Nov. 2020**
*Data Science Intern*                                                                             *Bangkok, Thailand*

- Increased success rate of micro-loan recall by 14% by using classification and clustering algorithms and alternative data from several sources to calculate loan repayment likelihood for 3M+ borrowers across various lending channels.
- Engineered features and improved model performance (AUC) by 22% using correlation and dimensionality reduction.
- Analyzed performance of ML generated leads and discovered data engineering discrepancies affecting 3 existing models.

**Kiatnakin Phatra Securities**                                                    **Jul. 2019 – Aug. 2019**
*Software Engineering Intern*                                                                     *Bangkok, Thailand*

- Improved operational efficiency by 20% by creating Python scripts that automatically compile and store PnL results.
- Developed back-testing pipelines to measure return metrics, maximum draw-down, and Sharpe ratio of three low-mid frequency trading algorithms on four years of OHLC data using Python backtesting library - Backtrader.
- Integrated detailed C++ logging for high-frequency trading algorithms and decreased average debug time by 20 min.

## Projects

**Semicolon Finance** ↗ | *Solidity, Chainlink, Superfluid*                                           **July. 2022**

- Payments streaming platform based on protocol KPIs for DAO contributors using ERC721s and Superfluid.

**Home-service Marketplace** ↗ | *React, Node.js, Express.js, MongoDB*                                  **Jun. 2021**

- Platform that connects 30+ home-service businesses with 100+ homeowners through an interactive job board.

**Crypto Trading Bot** ↗ | *Python, Pandas, NumPy, CCXT*                                               **Jan. 2021**

- Returned 28% in 2021 arbitraging spot-futures premium of crypto perpetual futures on centralized exchanges.

## Technical Skills

**Languages**: Python, Java, C, C++, HTML/CSS, JavaScript/TypeScript, SQL, Solidity, Rust
**Tools and Frameworks**: React, Node.js, Express, Apache Spark, Matplotlib, MongoDB, Firebase, AWS, GCP