

CPFD 2.0



BARRACUDA VIRTUAL REACTOR® USERS' CONFERENCE 2019

JUNE 27th – 28th

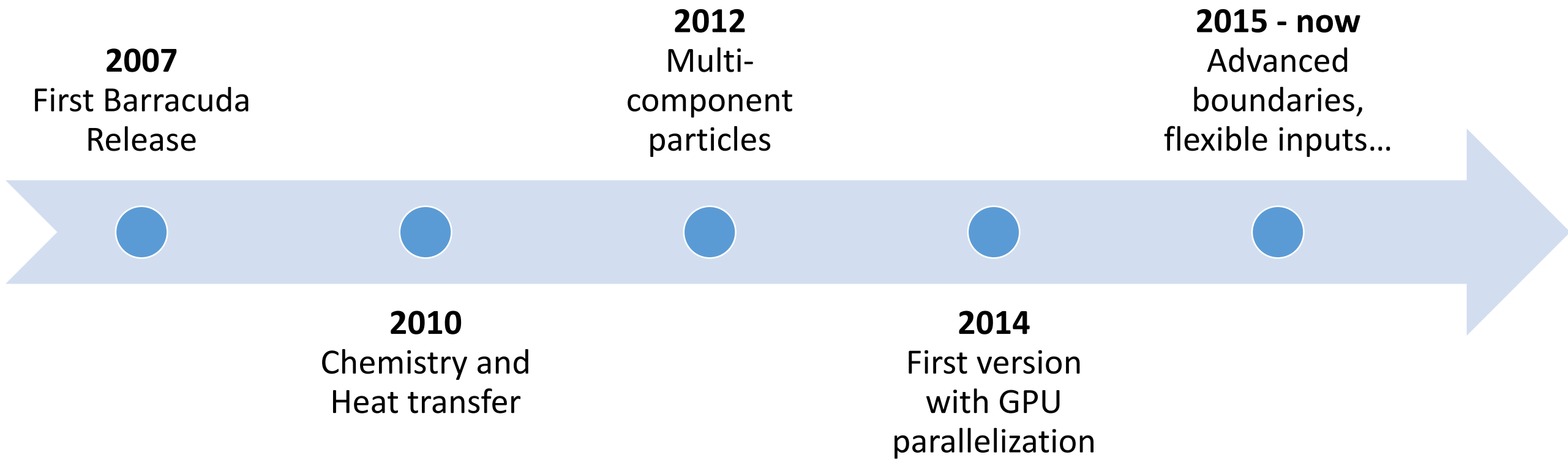
W Chicago Lakeshore Hotel
Chicago, Illinois USA

Rajat Barua

CPFD 1.0 History and Major Milestones

2001 – Arena-flow founded in Albuquerque by Dr. Ken Williams, Dr. Dale Snider

2006 – CPFD Software formed to address the non-automotive market



CPFD 2.0 – The goals and mission remain the same...

- **We develop, market, license and support an engineering software package for one focused application:**
 - **Fluidization reactor design, optimization and troubleshooting**
- **Mission is to provide the international fluidization industry an engineering tool – Barracuda Virtual Reactor – they can use with high confidence for gains in economy, reliability, unit design and scale-up**

...what has changed is how we are accomplishing our goals and mission.

CPFD 1.0 was an R&D centric organization, based in Albuquerque, NM



Los Alamos National Labs



CPFD Headquarters 2006 - 2018

CPFD 2.0 is a customer-centric company based in Houston, TX

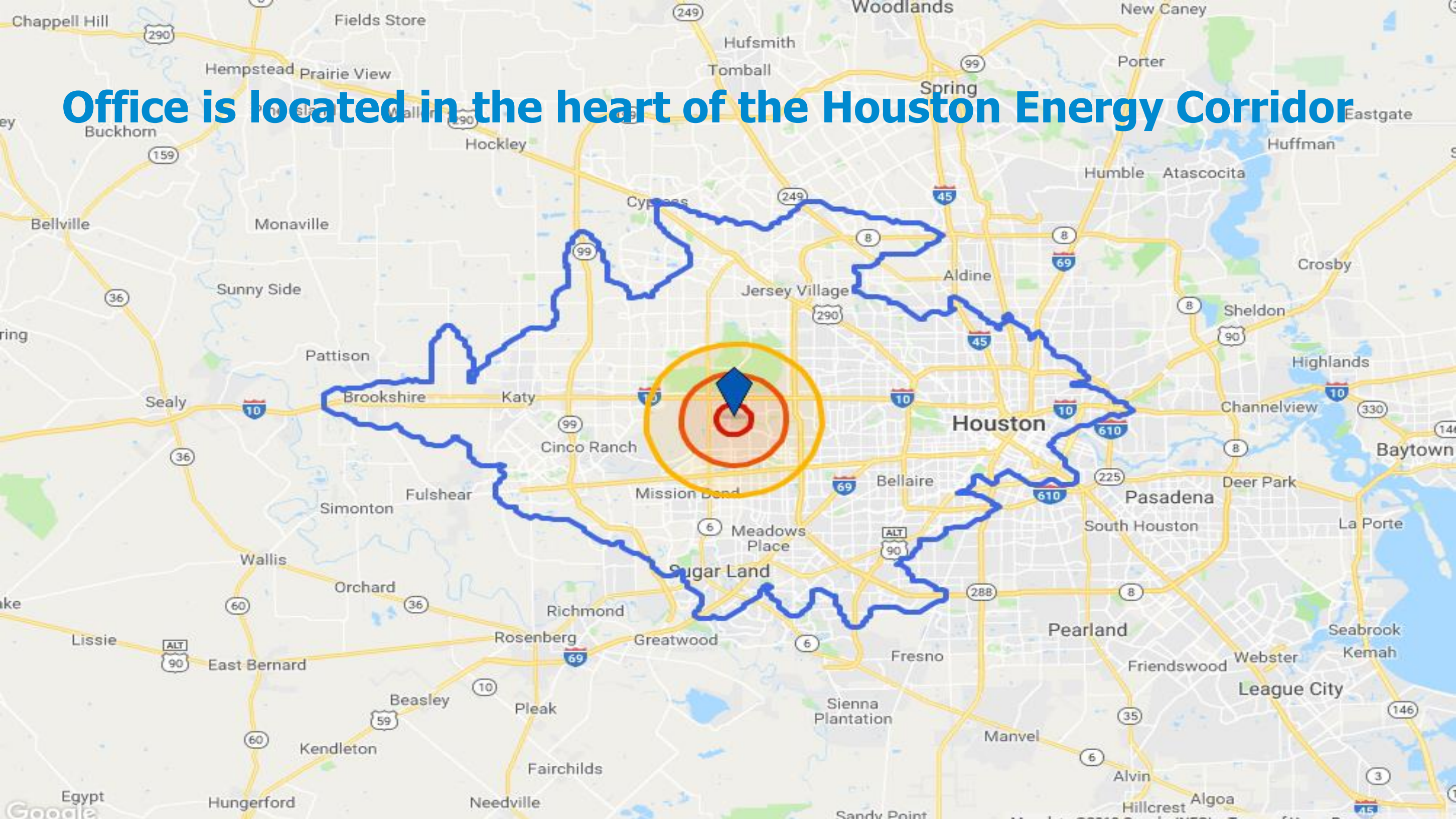


CPFD Headquarters 2019 onwards

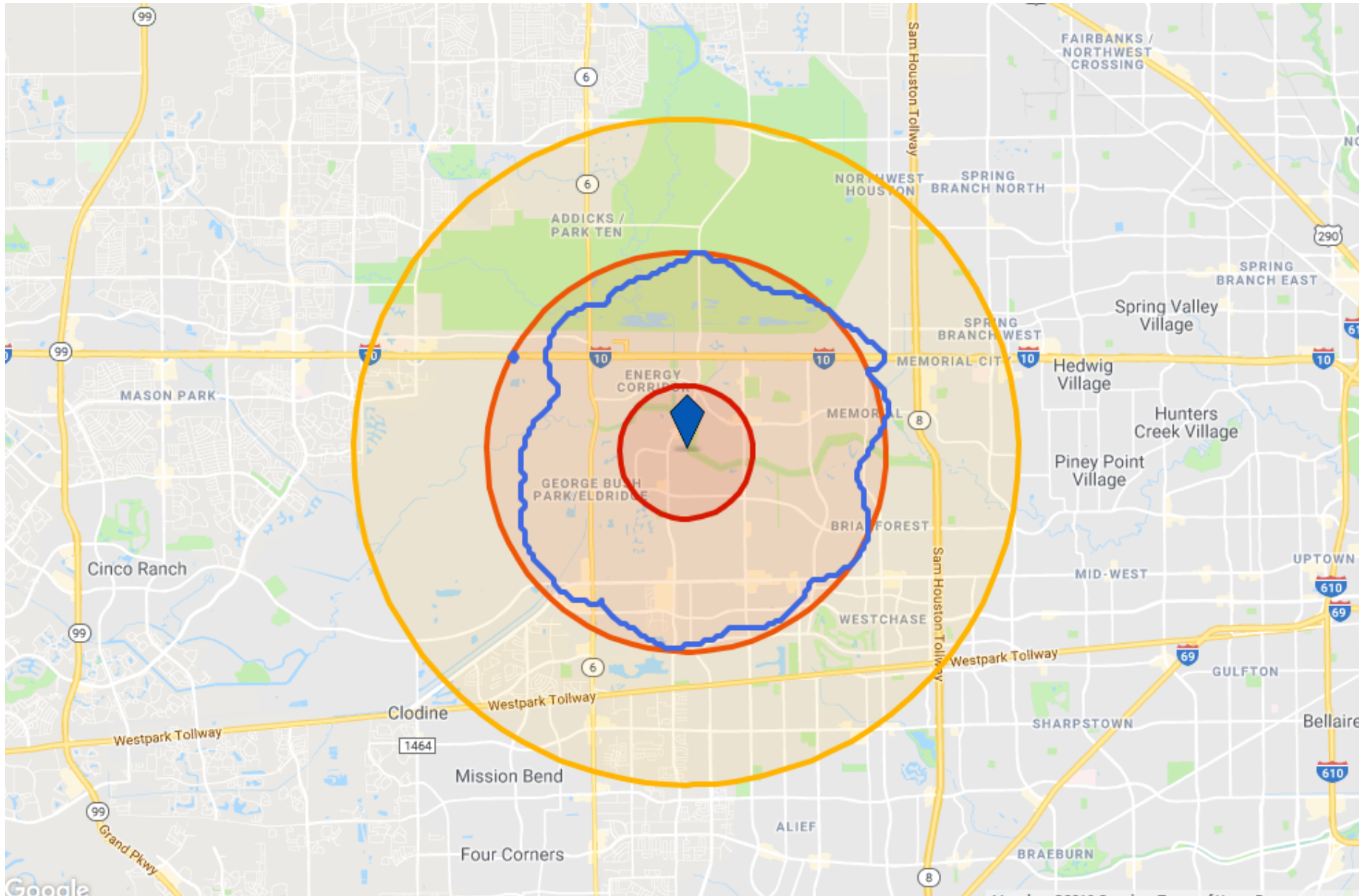
Houston lease is signed and the move will be completed in Q3



Office is located in the heart of the Houston Energy Corridor



Numerous clients are located within a 15 mile radius of the office



- Aramco
- BP
- ConocoPhillips
- Citgo
- Dow
- Foster Wheeler
- McDermott
- Philipps 66
- SABIC
- Shell
- SBM Offshore
- TechnipFMC
- Wood Group
- WorleyParsons

Computing hardware is being moved to a colocation facility



- Environment – outside of the flooding zones with accessibility in the event of flooding
- Security - access control through gate, 2 factor authentication with multiple checkpoints (interior lobby, mantrap), biometric authentication to datacenter floor
- Power – specialized HVAC and electrical systems with high redundancy precision cooling, full UPS backup, full generator backup

People remain our greatest asset...

In CPFD 1.0 we developed expertise in:

- Software
- CFD
- Fluidization

Domain knowledge and expertise was developed internally

The missing element was real-world industrial experience

...what has changed is the access we now have to a vast pool of industry expertise that exists in Houston to sustain our growth.

New Houston team members that have joined us YTD



Dr. Ali Akhavan

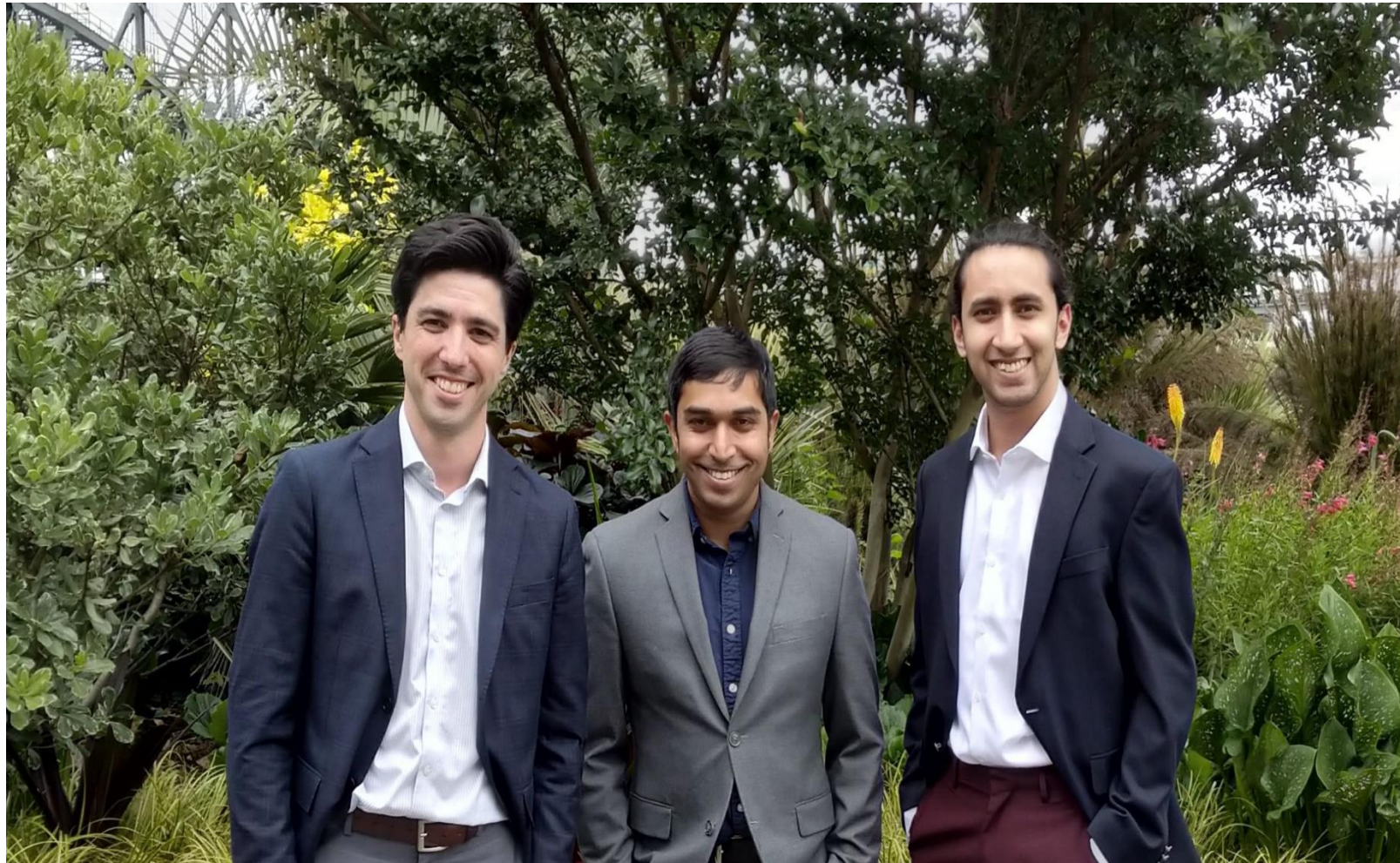


Dr. Peter Loezos



Bryan Tomsula

Portland, OR is the second office we have opened



Dr. James Parker Omar Ahmed Niraj Mehta

Summary

Significant investment has been made in:

- **Expansion of the technical team and internal capabilities**
- **Opening of new offices in Houston and Portland**
- **Product development**

Areas of strategic focus for the future:

- **International growth and expansion**
- **Engineering service projects**

