Kite

Kite is automating away the repetitive parts of writing code so software developers can be more productive. Similar to Smart Compose for Gmail, Kite’s Line-of-Code Completions feature uses deep learning to incorporate context and complete up to full lines of code code completions in real time. Kite’s Intelligent Snippets allow developers to complete complex, multi-token statements without copy-pasting from a web search or existing codebase. Backed by Trinity Ventures and the founders of Dropbox, PayPal & Twitch, Kite has raised $17 million to build the future of programming.

Kite与 Tabnine的对比

Jackson built TabNine on Open AI's GPT-2, which was intended for predicting words in a human-spoken sentence but is used by TabNine to predict the next token typed by developers, based on preceding tokens.

Whether Jackson's approach is the winning strategy remains to be seen, but for now it appears to offer more flexibility than Kite.

For TabNine versus Kite, it's a pretty interesting set of trade-offs," says Smith. "TabNine doesn't use any of the semantic information. That means their model doesn't understand or use the deeper structure of the code you're working with. It learns some elements of that, but it's pretty limited."

深度学习模型与语义模型的对比

"There's a danger of a false dichotomy here: when comparing deep models with semantic approaches, it's easy to forget that you can use both at once. Indeed, this is what TabNine does when semantic completion is enabled: it uses the semantic completer to filter the deep model's results," Jackson told ZDNet in an email.

微软vs的智能提示

Smith这个是kite的创始人 concedes Microsoft's approach is "simple to build, simple to implement, and very fast", but notes it lacks multi-token completions and takes "very little context" into account.

Kite支持的语言比较少，希望更快的迭代，还是因为一个用的是语义模型，一个是深度学习模型。